VOL. XXXVII JUNE, 1918 No. 6

ARCHITECTVRE

The PROFESSIONAL ARCHITECTURAL MONTHLY

CONTENTS

TEXT PAGES

THE ARCHITECTURE OF THE SMALL HOUSE. (Illustrated) - - - - - - - - - Pages 145–154
By Marcia Mead, A.I.A.

EDITORIAL AND OTHER COMMENT: "Building for the Future," "Work to Do Now," "Are Architects Practical?" - - - - - - Pages 155, 156
By Alexander B. Trowbridge, A.I.A.

AN ARCHITECT'S IMPRESSIONS OF OLD SAN ANTONIO. (Illustrated) - - - - - - - - Pages 157–159
By Harvey Partridge Smith

THE ARCHITECT'S OPPORTUNITY—REMODELLING. (Illustrated) - - - - - - - - Pages 160–164
By Arthur B. Pendleton

THE PLAZA AT ALBANY, N. Y. (Illustrated) - - Pages 165–167
Marcus T. Reynolds, Architect

ARCHITECTS AND THEIR PRACTICE - - - - Pages 168, 169
By "Experience"

THE ENTRANCE TO SALEM FIELDS CEMETERY. (Illustrated) - - - - - - - - - Page 172
Percy W. Darbyshire, Architect

LEGAL DECISIONS - - - - - - - - Pages 173–175
By John Simpson

PLATES AND ILLUSTRATIONS

BUILDINGS OF THE DELAWARE AND HUDSON CO. AND "ALBANY EVENING JOURNAL," ALBANY, N. Y.
  Façade, The Plaza - - - - - - - *Frontispiece*
  Tourelle and Dormers, "Albany Evening Journal" Building - - - - - - - - Plate XCIV
  Main Entrance, "Albany Evening Journal" Building - - - - - - - - - - Plate XCIV
  Entrance to Hendrick Hudson Portal - - Plate XCV
  Hendrick Hudson Portal, Giving Access to River Front - - - - - - - - - Plate XCV
  Corbel Supporting Tourelle - - - - Plate XCVI
  Arcade, The Plaza - - - - - - - Plate XCVI
  Scale Detail - - - - - - - - Plate XCVII
  Scale Detail - - - - - - - - Plate XCVIII
Marcus T. Reynolds, Architect

ENTRANCE TO SALEM FIELDS CEMETERY, CYPRESS HILLS, BROOKLYN, N. Y. - - - Plates XCIX, C
Percy W. Darbyshire, Architect

GROLIER CLUB, NEW YORK.
  Exterior - - - - - - - - - Plate CI
  Detail of Entrance - - - - - - Plate CI
  Library - - - - - - - - - Plate CII
  The Club Room - - - - - - - Plate CII
Bertram Grosvenor Goodhue, Architect

HOUSE, J. M. R. LYETH, RIVERDALE-ON-HUDSON, N. Y.
  Exterior - - - - - - - - - Plate CIII
  Porch and Terrace - - - - - - - Plate CIV
  Garage and Service Wing - - - - - Plate CIV
  Living-Room - - - - - - - - Plate CV
  Dining-Room - - - - - - - - Plate CV
  Hall - - - - - - - - - - Plate CVI
  Plans - - - - - - - - - Plate CVI
Dwight James Baum, Architect

PRIVATE SWIMMING-POOL, PHILIP DEXTER, MANCHESTER-BY-THE-SEA, MASS. - - - - Plate CVII
Charles N. Coggswell, Architect

MEASURED DETAILS, BRENTWOOD.
  No. 3 - - - - - - - - - - Plate CVIII
  No. 4 - - - - - - - - - - Plate CIX
Measured and Drawn by Joseph Younger

HOUSE AND PLANS, W. H. MCGILL, WINCHESTER, MASS. - - - - - - - - Pages 170, 171
Adden & Parker, Architects

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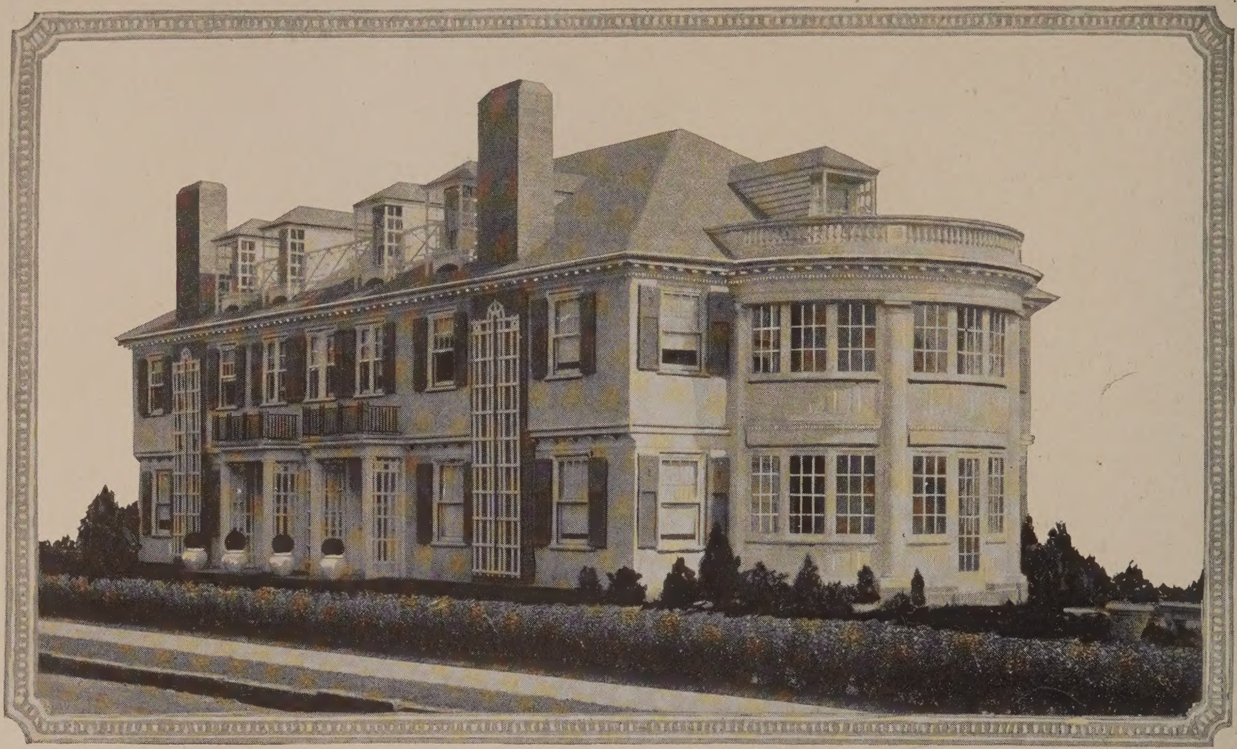

Bishopric Board makes Stucco finish popular

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Bishopric Board was "discovered" six or eight years ago and Bishopric Board was the background used in the home of Mr. P. N. Leone at Hartford, Conn., illustrated above, and recommended by Architect R. F. Barker.

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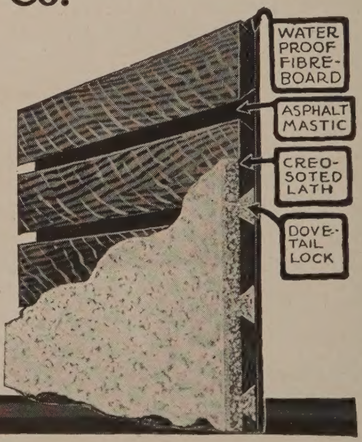

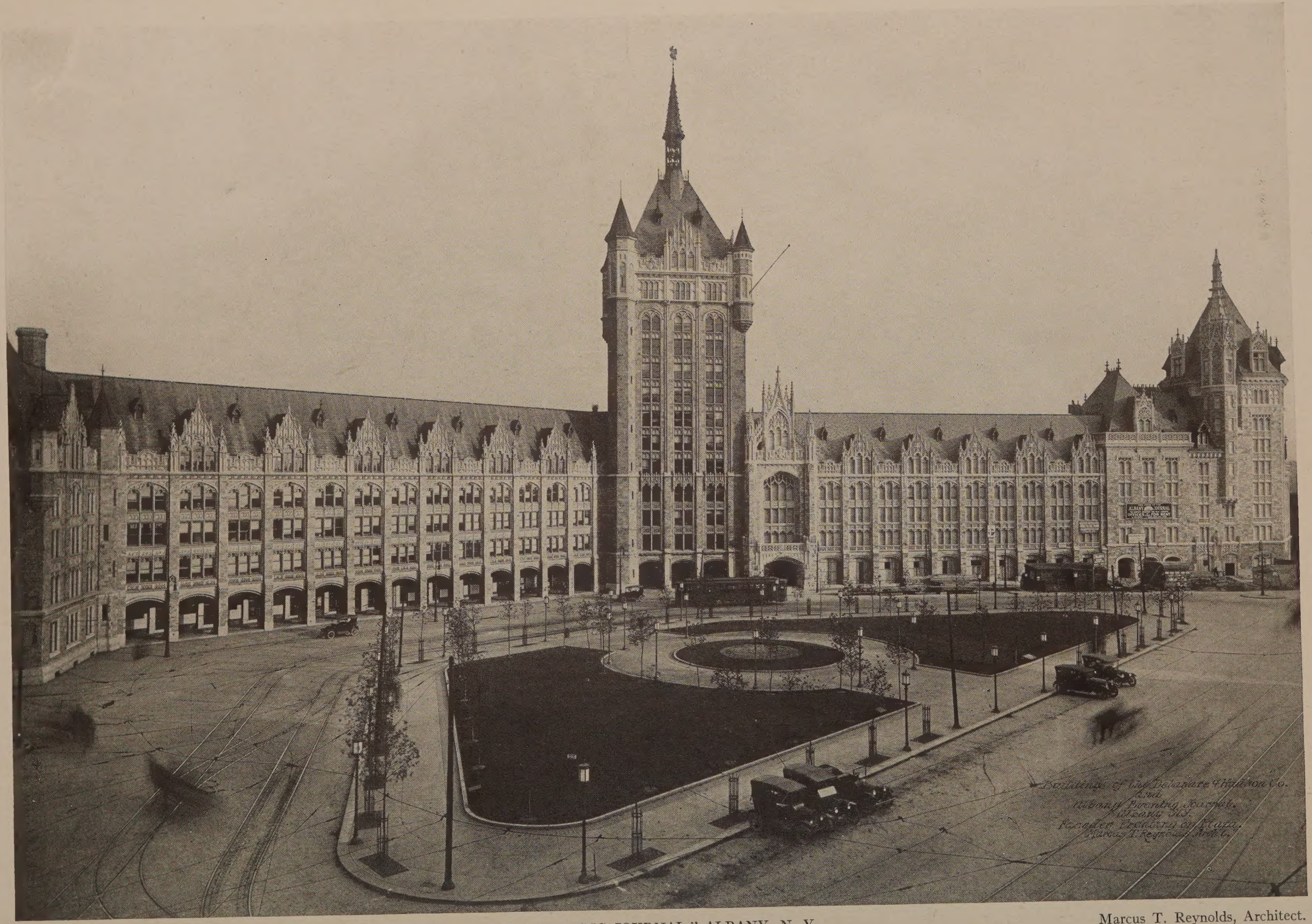
Buildings of the Delaware & Hudson Co.
and
Albany Evening Journal.
Albany, N.Y.
Facades Fronting on Plaza.
Marcus T. Reynolds Archt.

BUILDINGS OF THE DELAWARE AND HUDSON CO. AND "ALBANY EVENING JOURNAL," ALBANY, N. Y.

Marcus T. Reynolds, Architect.

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VOL. XXXVII JUNE, 1918 No. 6

The Architecture of the Small House

As Influenced by Our Modern Industrial Communities

By Marcia Mead, A.I.A.

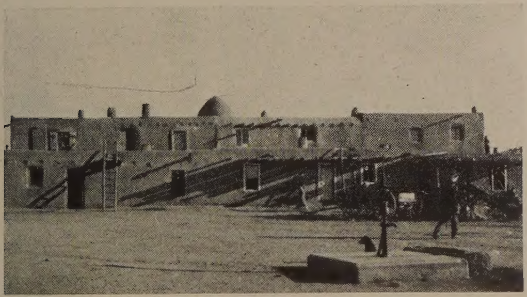
The illustrations for this article have been carefully selected from what the writer considers some of the best work that is being done in this country, and which is taking its place in the modern architect's library as valuable precedent to follow in modern community design. Any comment or criticism in connection with them is made in a disinterested constructive sense, which the writer hopes will be accepted at its face value for the common cause of improving our home architecture and leading to the development of a national community spirit.

THE small house in this country might have been discussed a few years ago by a wave of the hand toward mile after mile of overornate, formless combinations of building materials.

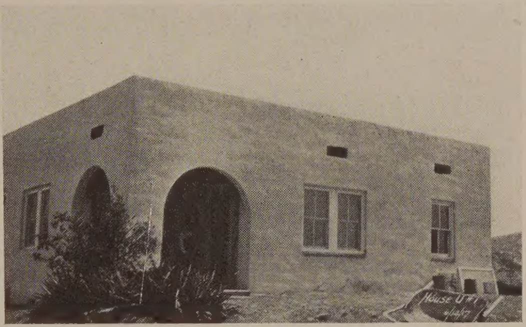
Since the development of the colonial style in the beginning of our history we have floundered and digressed. The spasmodic attempts at individuality in building still seem to be based only upon the blind desire to be different, without any knowledge of the principles of design.

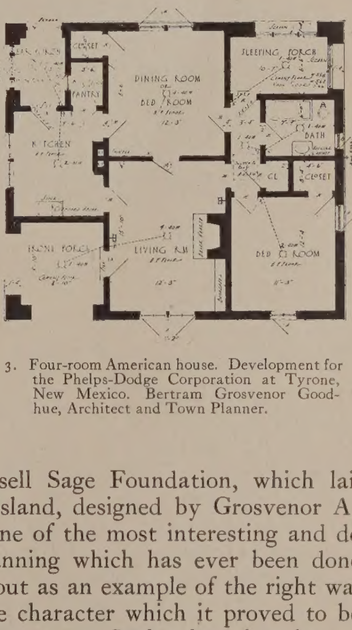
1. Adobe house near Santa Fé. Photographed by the architect in connection with research work conducted for the development for the Phelps-Dodge Corporation at Tyrone, New Mexico. Bertram Grosvenor Goodhue, Architect and Town Planner.

The small house has been almost wholly the product of the speculative builder or the "small contractor," whose ideas of home comfort have not gone beyond providing the requisite number of rooms and the so-called modern improvements. That the arrangement of the different rooms of the house according to their relative functions is vital to the efficient running of a household has not occurred to him. His ideas of architecture are limited to the exterior only, and are expressed by the effort to provide as many gables and broken roof lines as possible, as well as the greatest multiplicity of ready-cut mouldings within the limits of the available funds. He has catalogues galore from which these details may be ordered by the yard and applied at every available spot in the structure. The whole has been a pathetic attempt of ignorance to do ambitious things at no extra cost to the owner.


2. An Indian village near Sante Fé. Photographed by the architect in connection with research work conducted for the development for the Phelps-Dodge Corporation at Tyrone, New Mexico. Bertram Grosvenor Goodhue, Architect and Town Planner.

The necessity for meeting the housing problem forced itself upon the attention of England and Germany several years ago. Through the influence of the work in those countries and the growing congestion here, we began to realize the deplorable waste of hit-or-miss development going on in this country, and that the solution of the problem lay in the intelligent planning of our communities.

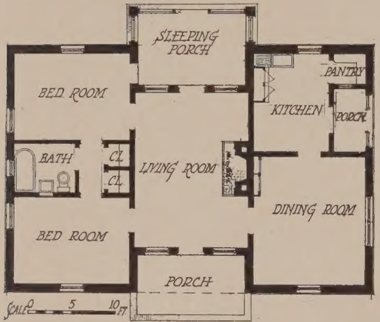




3. Four-room American house. Development for the Phelps-Dodge Corporation at Tyrone, New Mexico. Bertram Grosvenor Goodhue, Architect and Town Planner.

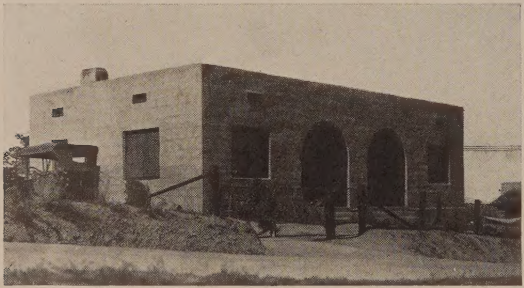
One of the first community developments in this country was made by the Russell Sage Foundation, which laid out Forest Hills, Long Island, designed by Grosvenor Atterbury. The result is one of the most interesting and delightful bits of town planning which has ever been done, and it will always stand out as an example of the right way to solve a problem of the character which it proved to be, that of a high-class development. Such a luxurious layout, however, is beyond the reach of the average wage-earner.

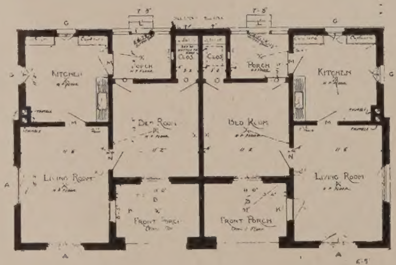
The simple, inexpensive home that will cost in the neighborhood of $2,000 to $4,000 or $5,000 in normal times is that with which we are concerned—the house for rent and the house for sale, which wage-earners making from $15 to $30 per week can afford to live in and maintain.



4. Five-room American house. Development for the Phelps-Dodge Corporation at Tyrone, New Mexico. Bertram Grosvenor Goodhue, Architect and Town Planner.

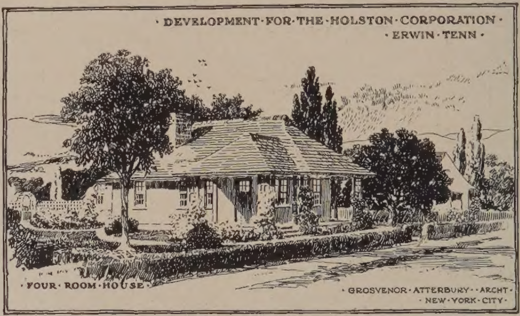
In securing a home the housewife is usually helpless, for the man who has found his job looks about to select a house for his family before he sends for them. What he looks for probably is the requisite number of rooms, modern plumbing, and a heating apparatus that his wife can run if necessary. It does not occur to him to note whether or not the stove is in a dark corner, the sink of the proper height, and that the distance from the kitchen work-table to the front door does not multiply steps. Moreover, if the housewife had the chance to choose her own home, how many ordinary houses could she find in which the planner had studied the routing for the preparation of a meal, proper ventilation, or the arrangement of the furniture in the bedrooms? Because housing is now being done on a large scale, the architect, whose business it is to solve these problems, is able to give to each unit plan the amount of individual study it deserves.





5. Two-family American house. Development for the Phelps-Dodge Corporation at Tyrone, New Mexico. Bertram Grosvenor Goodhue, Architect and Town Planner.

The successful design of the house depends upon the carefully studied plan in relation to the exterior. The well-worn saying that "simple lines are lines of beauty" holds in the architecture of the small house more than in


· DEVELOPMENT·FOR·THE·HOLSTON·CORPORATION ·
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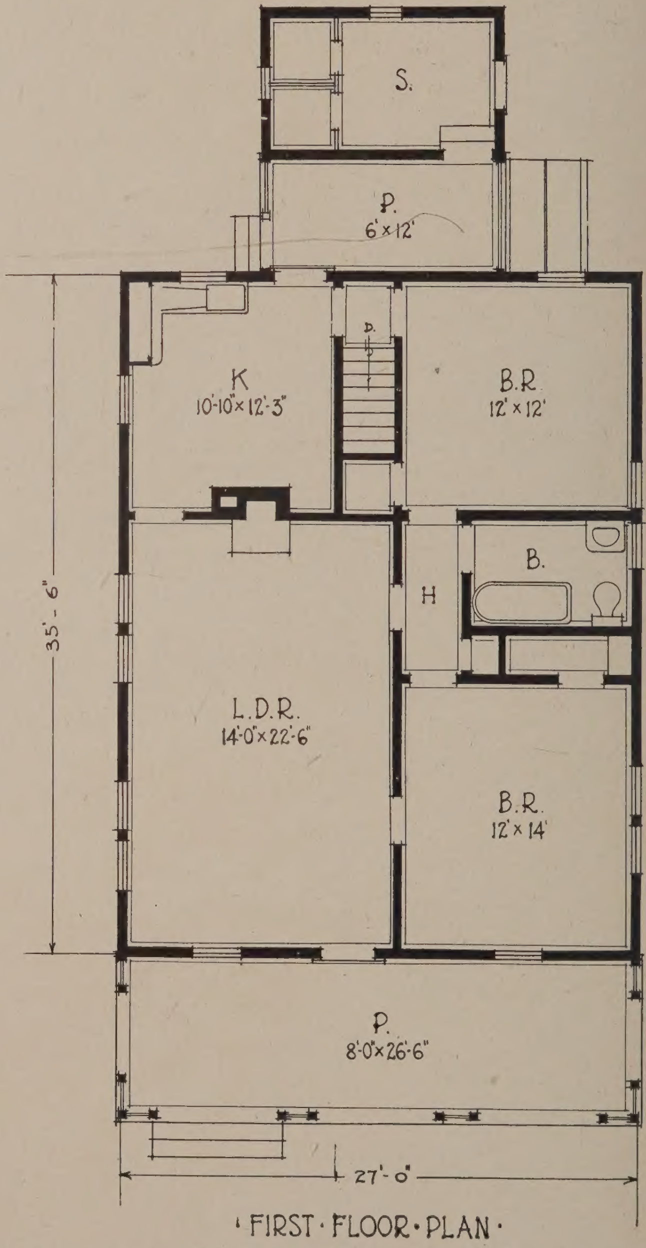
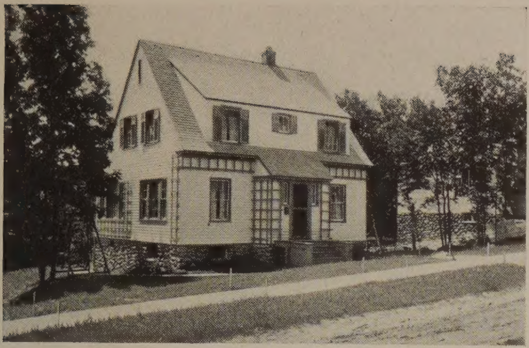
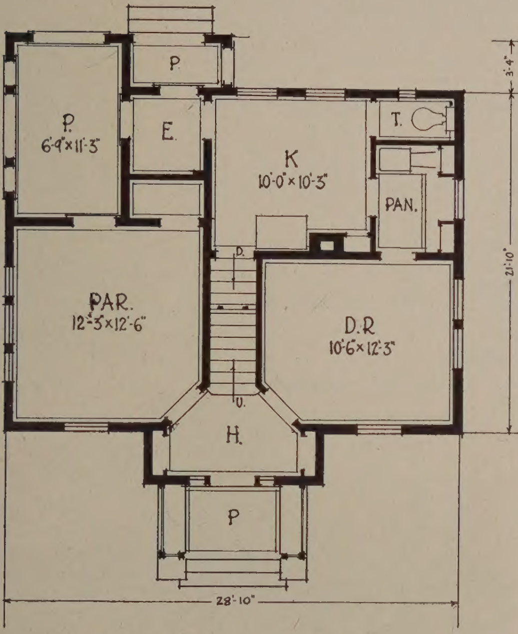
· GROSVENOR·ATTERBURY··ARCHT·
· NEW·YORK·CITY·

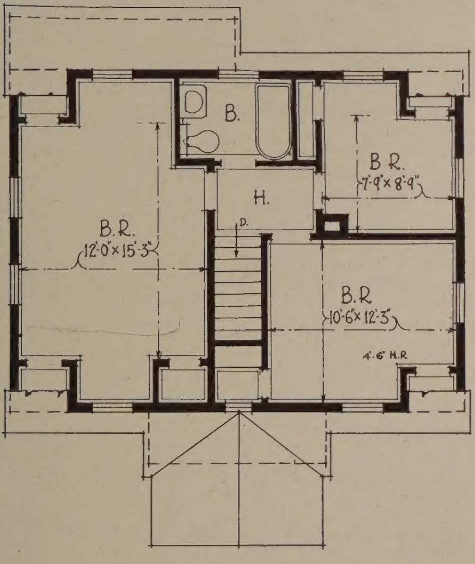


6. Four-room bungalow. Development for the Holston Corporation, Erwin, Tenn. Grosvenor Atterbury, Architect.



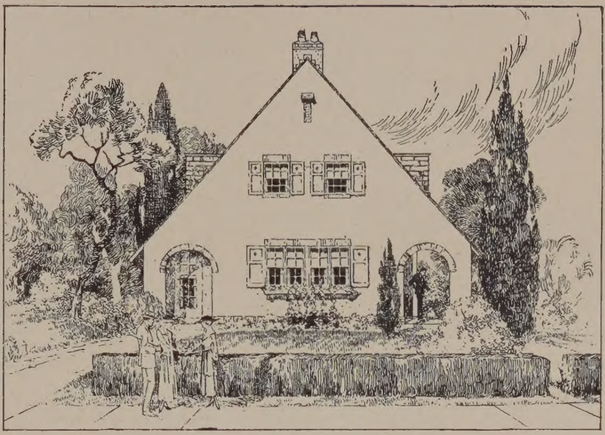


· FIRST FLOOR· PLAN ·

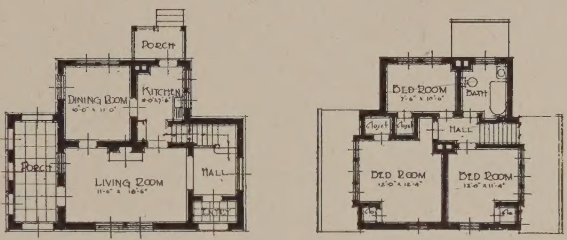


SECOND·FLOOR·PLAN

7. Six-room house. Indian Hill, an industrial village for the Norton Company, Worcester, Mass. Grosvenor Atterbury, Architect.

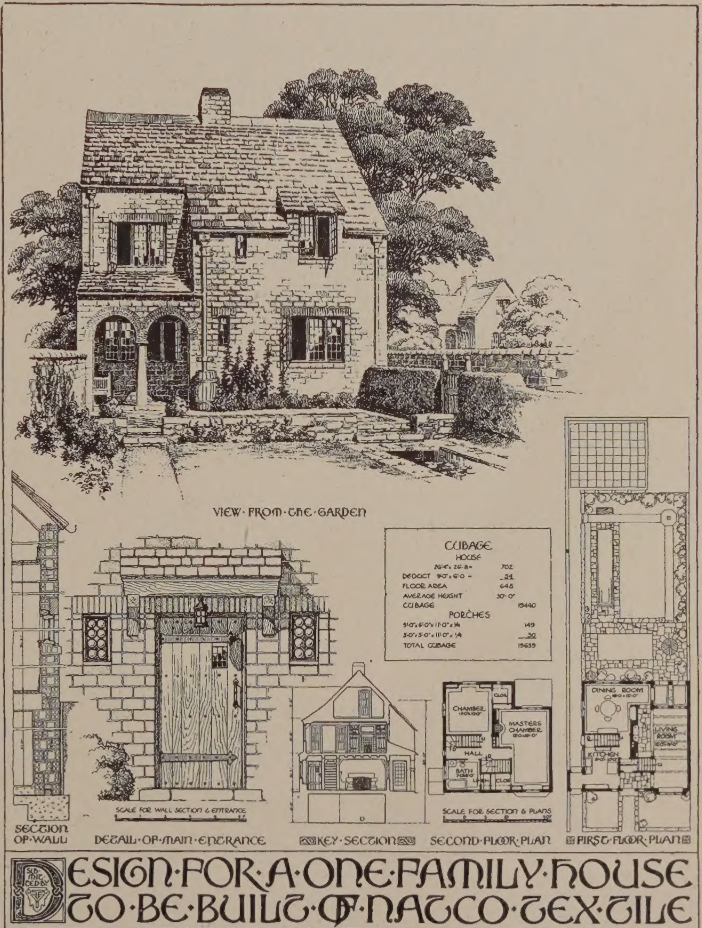


HOUSE No. 13



·FIRST·FLOOR·PLAN· ·SECOND·FLOOR·PLAN·

8. Goodyear Heights, Akron, Ohio. Geo. H. Schwan, Architect.



CUBAGE

HOUSE

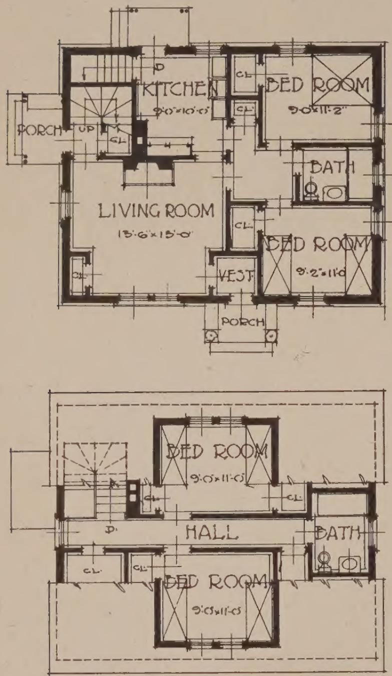
26'-4" x 26'-8" =	702	
DEDUCT 9'-0" x 6'-0" =	54	
FLOOR AREA	648	
AVERAGE HEIGHT	30'-0"	
CUBAGE		19440

PORCHES

9'-0" x 6'-0" x 11'-0" x 1/4	149
3'-0" x 3'-0" x 11'-0" x 1/4	30
TOTAL CUBAGE	15639

9. First prize design submitted by W. L. Risley and James Perry Wilson, Newark, N. J.

any other class of design. That the house must be inexpensive is a potent factor in bringing us back to the first principles of good design, simplicity, suitability, harmonious proportions, and pleasing fenestration. This lack is nowhere better evidenced than in an ordinary group of farm buildings, where we often find an atrocious gingerbread house, which the natural surroundings vainly endeavor to hide, while sheds and barn are of charming lines. In the latter the builder was satisfied to do the simple thing, with the result that, architecturally, we should much prefer to live in the barn.

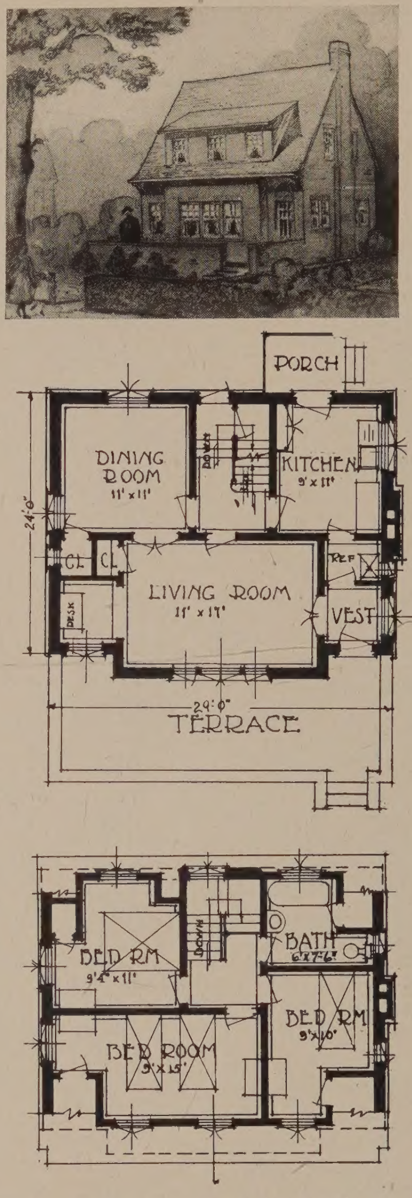


10. Competition for housing immigrants, held by the National Americanization Committee. Schenck & Mead, Architects.

Certain limitations, such as land values, climate, cost of local materials, etc., are potent factors in the design of the house. Land values usually determine whether it is possible to have single houses, semi-detached, or row houses, and are a most important consideration. Artistic grouping also largely determines the type of house. The end of a vista is often best terminated by a group of houses. A corner is most adaptable to a two-family house where each entrance may be on different streets.

A most interesting example of the proper influence of climate and local precedent upon design is the development at Tyrone, New Mexico, for the Phelps-Dodge Corporation. The architect has considered local conditions, suitability of materials, etc., and has made a careful study of some of the old Indian houses which have been in existence in the locality for many years. A glimpse of two or three of these old houses will show their bearing upon what the architect reasoned was the logical solution of the problem. (Illustrations 1 and 2.)

Illustrations 3, 4, and 5 show typical one and two family houses. By their lines one readily recognizes their fitness for the location. Their floor arrangement provides for all possible cross circulation of air, while the windows are smaller than we should require in a northern house, because of the intense light in that region. In Illustration 3 the adaptability of the dining-room for use as a bedroom, connecting with the bedroom suite, is good.

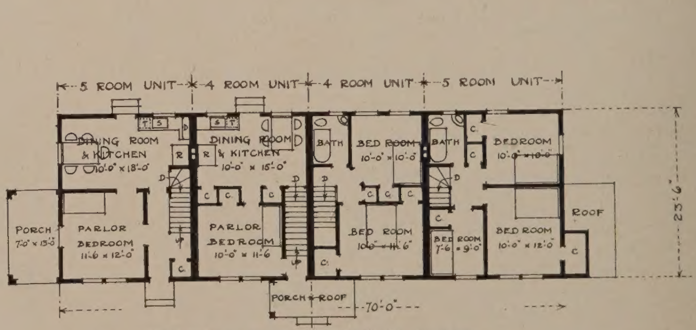


11. Six-room house. Schenck & Mead, Architects.

The bungalow, or house with all the rooms on the ground floor, is comparatively simple (Illustration 6), but in this climate, where the heating of the house, cost of cubage, and land values tend to superimpose the bedrooms over the living-rooms, the problem is more difficult. The average small house is too high for the ground it covers and is most difficult to treat successfully and at the same time secure the full height of all the rooms on the second floor. This problem of scale is successfully and charmingly solved in Illustrations 7, 8, and 9.

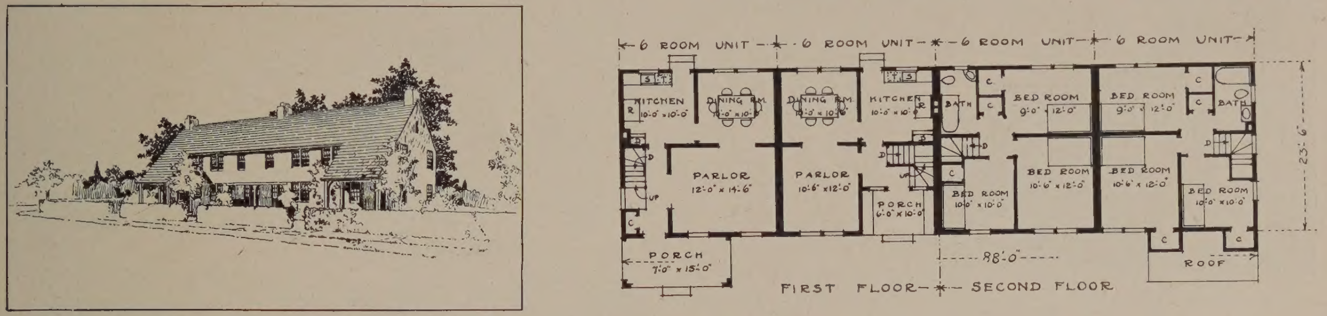
One of the first essentials of good arrangement is to secure proper personal privacy in the home. In one of our current magazines is illustrated what is supposed to be a modern housing layout. Almost without exception in the different unit plans the bathroom is on the first floor, off the

12. Four-family house (four and five room units). Murphy and Dana, Architects.

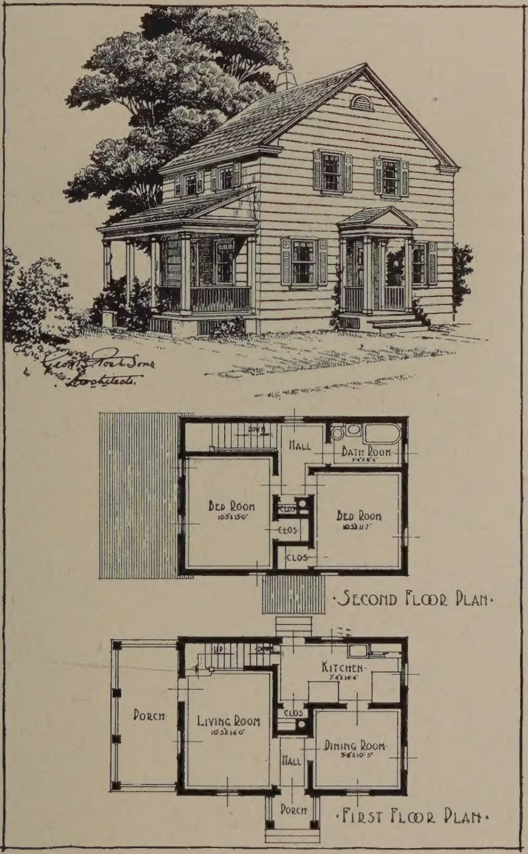


kitchen. To reach it from the bedrooms on the second floor, it is necessary to descend the stairs into the living-room and pass through the kitchen.

The care which should be observed in this respect is plainly shown in Illustration 10, a house designed for a small family, who find it necessary to eke out a small income by keeping boarders. The family portion is entirely on the ground floor, with the bedrooms and bath grouped around a small hall, arranged in such a manner that the family life may be maintained in the usual wholesome way, free from intrusion. The only contact which the boarders have with the family is in the public room of the house, which is a combined living-room and dining-room. The boarders' suite on the second floor is arranged with equal regard for personal privacy. This suite has its separate entrance, which is so located as to be under the supervision of the housewife, which factors largely in her ability to maintain the character of her home.



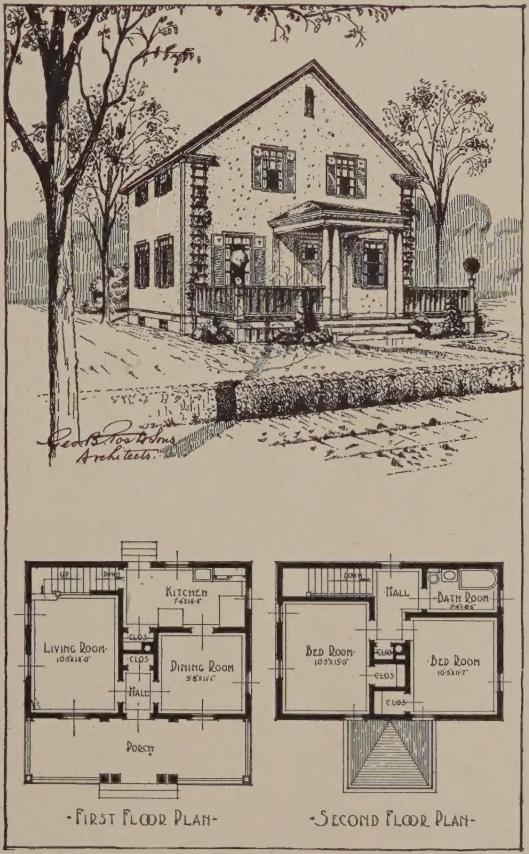
13. Four-family house (six-room units). Murphy and Dana, Architects.



14. Five-room clapboard house (B-8). Eclipse Park Development, Beloit, Wis. Geo. B. Post & Sons, Architects.

A difficult problem in designing the plan is to provide the proper number of bedrooms for the small wage-earner with a family of three or four children. Unless the children are all of the same sex, two bedrooms are not enough. Three should be the minimum for the average family. It is better to combine the dining-room with the living-room or kitchen and provide a third or fourth bedroom. To do this and keep the roof lines low is often a serious problem, and cannot always be solved without arranging for one bedroom on the first floor.

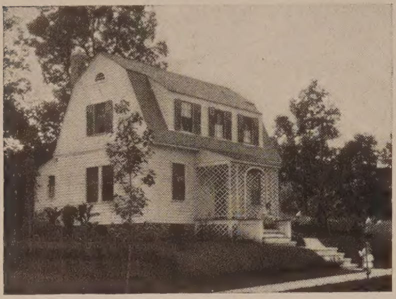
Illustration 11 shows an unusual plan, designed to appeal to the small family which desires the luxury of a dining-room, or the larger family which would prefer the dining-room and living-room combined, and have an extra

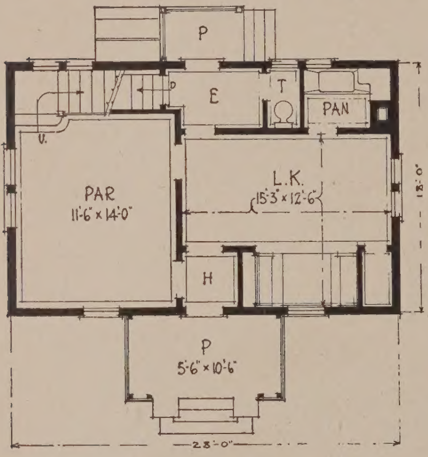


15. Five-room stucco house (B-9). Eclipse Park Development, Beloit, Wis. Geo. B. Post & Sons, Architects.

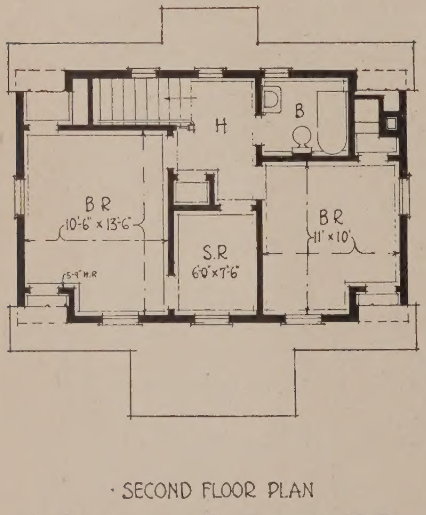
sleeping-room. Observe that in this plan the dining-room has all the essentials of a bedroom. It has a roomy closet, and is accessible to the bathroom on the floor above, without passing through any of the other rooms.

The matter of scale in design is much more easily dealt with in the semi-detached or terrace house, as the ground area is greater and is in better proportion to the height. The same simplicity should be observed throughout, and if beauty of line and proportion are sought, it is not necessary to resort to elaborate detail. (Illustrations 12 and 13.)





·FIRST·FLOOR PLAN·



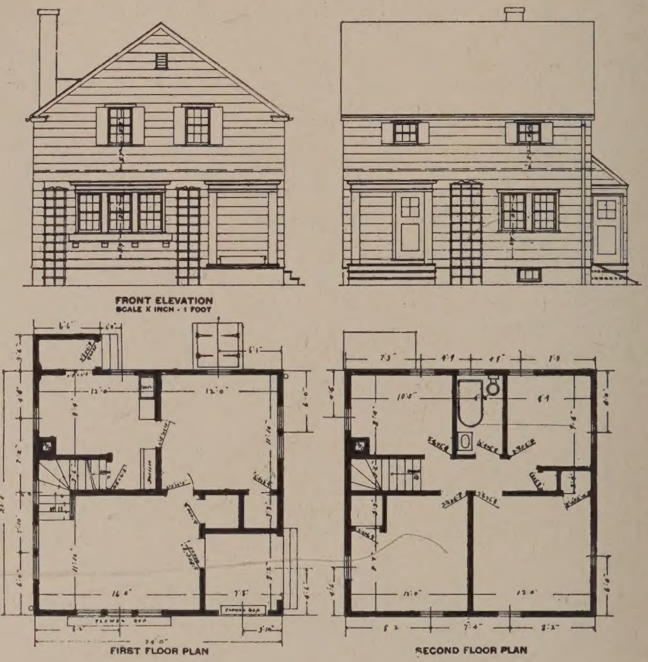
·SECOND FLOOR PLAN

16. Five-room house. Indian Hill, an industrial village for the Norton Company, Worcester, Mass. Grosvenor Atterbury, Architect.

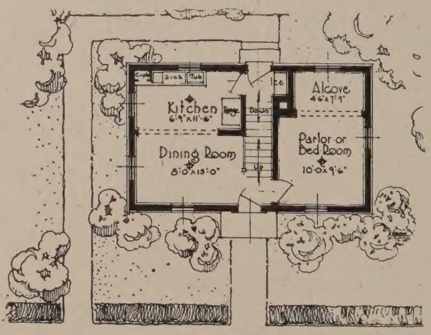
The design of the house is affected by the exposure. Illustrations 14 and 15 show a method of adapting the same unit plan to different exposures by placing the porch where it is most needed for protection from sun and weather. The use of different materials also gives a variety of design, while not detracting from the general harmony of the scheme. As will be seen, the plans of these two houses are identical, while the character of the two exteriors is distinctly different and individual.

The general arrangement of plan is not so flexible. Within a certain limit it is not possible to deviate from an arrangement which will afford the highest efficiency in the mechanics of housekeeping; hence the reason for repeating many times throughout the development a unit plan which has been found best suited to the needs of housekeeping in that particular locality.

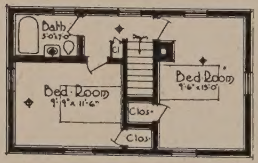
A characteristic omission in the design of the small house is the proper provision of space for a refrigerator. The refrigerator has become practically a necessity in every home, and its disposition is usually left to the housewife. It should be accessible to the kitchen, but not in the kitchen, which, being a warm room, greatly augments the ice bill. A favorite location for the refrigerator seems to be in a kitchen-entrance vestibule, a good place for the refrigerator, but such a vestibule usually cuts off the direct cross circulation which a kitchen so much needs. This has been well thought out in the plan of the house shown in Illustration 16—a charming arrangement of a combination dining-room and kitchen, in which the circulation of air is all that could be desired. The refrigerator here could well be placed either in the pantry or in the kitchen vestibule. Also in the four-room house, shown in Illustration 17, the ice-box is well arranged for; and in Illustration 18, providing the heating flue is well insulated. (See also Illustration 24—inside house—for the disposition of refrigerator.)



17. House No. 16. Civic Building Company's Development, Flint, Mich. Davis, McGrath & Kiessling, Architects.



·- FIRST - FLOOR - PLAN-



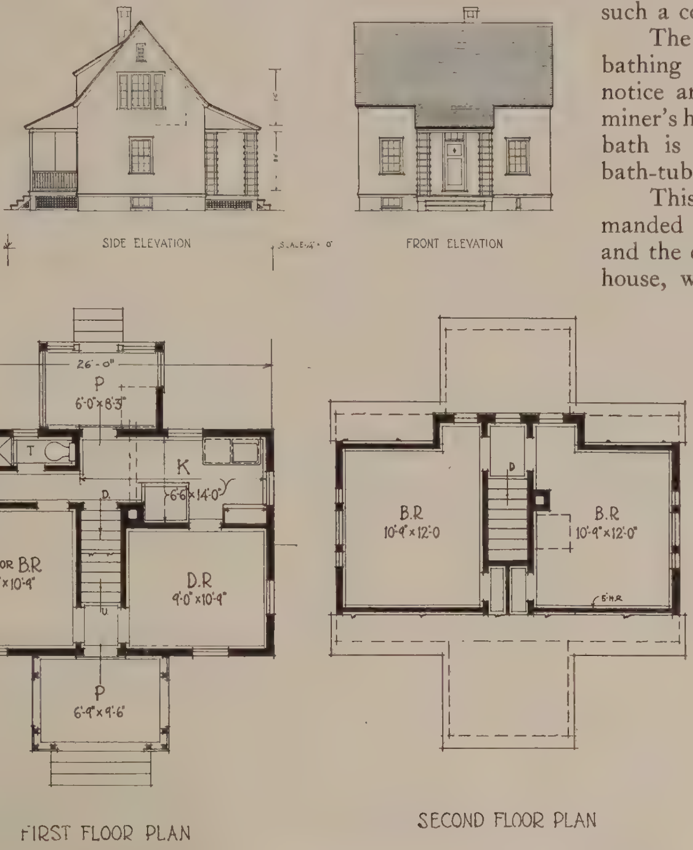
- SECOND - FLOOR - PLAN·

18. Four-room house. Initial experiment in government aid, under direction of the Massachusetts Homestead Commission. Kilham & Hopkins, Architects.

Another important feature of a good plan, which every housewife will appreciate, is the locating of the windows and of the working surfaces in the kitchen so that the light will come either from the side or the front of the worker. Where the stove is placed as shown in Illustration 7, the housewife must cook in her own shadow. Also, as the average woman is right-handed — and washes her dishes with her right hand, disposing of them with her left—it is a safe guess always to put the drain-board on the left side of the sink.

The front door and the stairs should be accessible to the kitchen, the centre of household activities, without the necessity of passing through other rooms. This arrangement saves steps for the housewife, and lightens her labors of keeping the house tidy by making it possible to shut off rooms not in use—rooms need rest as well as people. It also enables her, unnoticed by the family or chance guest, to perform the miracle of presiding at her table in a cool, fresh frock after the heated labors of preparing the meal.

Some of these principles have been carefully thought out in the development of the plan shown in Illustration 11. The stairs lead up from the kitchen door. The housewife answers the front door-bell by passing directly through the refrigerator-room. The working surfaces, including a table, which may be placed between the hall-door and the cupboard, are lighted from the side, and the necessary space is provided for the kitchen chair. All rooms, including the bath, have cross circulation, and there is the added comfort of a writing alcove off the living-room, which offers some degree of privacy. The boys and girls who, at school, are given the usual assignments of "home work," will appreciate such a corner as this.



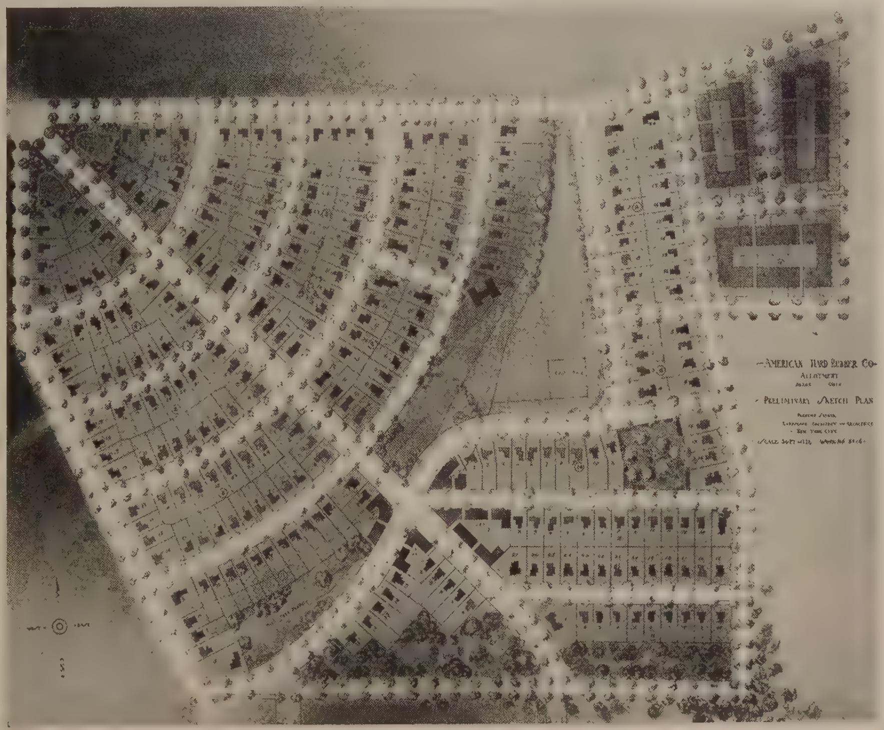
19. Four-room house. Development for the West End Coal Company. Grosvenor Atterbury, Architect.

The question of proper bathing facilities brings to our notice an interesting plan for a miner's house, in which a shower-bath is provided instead of a bath-tub. (Illustration 19.)

This particular problem demanded the simplest solution, and the dimensions of this little house, which is but 17′ x 26′, show that it is in itself an achievement in compact design.

To return to the question of bathing facilities. A moment of cool reasoning convinces one that the shower is the most sanitary cleansing bath that can be provided. Men, as a rule, prefer the shower. Women, who become accustomed to them in the gymnasiums, soon learn to prefer them to the tub. In the boarding-house, where many people use the same fixture, there is no longer any question but that the shower is the right thing. When we finally decide to do what is best for the children, the question of the proper bath fixture will be solved. We are not yet accustomed to the shower in the home, and are not yet ready to give up the tub, but where possible a shower should be provided in addition to the tub.

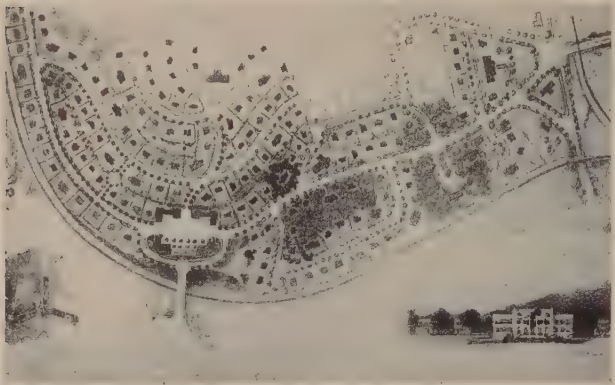
Terrace or row houses, if well planned, are not the monotonous rows that have been erected



20. General plan. Development for the American Hard Rubber Company, Akron, Ohio. Prentice Sanger, Landscape Architect and Architect.

by the score in our unlovely industrial towns. On the contrary, if properly designed, they have distinct advantages in many respects over the single house. They are more easily heated, and the exterior upkeep is reduced by half. They may have the same privacy and the same window area. It is often found that the inside houses rent before the outside and single houses.

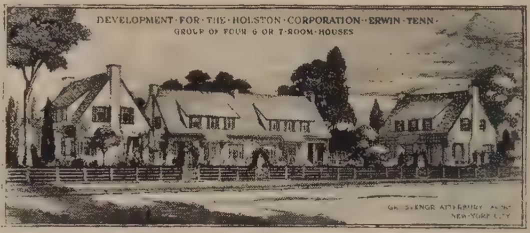
As the exterior of the house tells more or less of the nature and use of the interior, so should the community plan, by its lines of circulation and subdivision, express the natural contour of the land and the use to which it is to be put. The allotment plan for the American Hard Rubber Company at Akron, Ohio, shows a careful interpretation of contour lines. Here a valley runs through the plot and presents a difficult problem. (Illustration 20.)



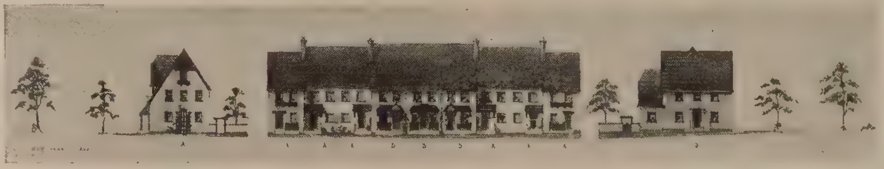
21. General plan of Indian Hill, an industrial village for the Norton Company, Worcester, Mass. Grosvenor Atterbury, Town Planner and Architect.

22. Photograph of site. Indian Hill, an industrial village for the Norton Company, Worcester, Mass.

One of our most happy and successful designs for a modern development, in which the opportunity has been used to the best advantage, is that of Indian Hill at Worcester, Mass. (Illustration 21.) The streets and paths and curving lot lines indicate the rounded hillside, and the open treatment of the community centre suggests the existence of a charming view over the valley. This mental picture is confirmed in fact by the view of the site shown in Illustration 22. Such faithful interpretation of a natural setting indicates the skill of the true designer. This same spirit should design the houses of such sizes as are needed, and, by massing and grouping rather than by changing their individual style, secure a wholesome variety.

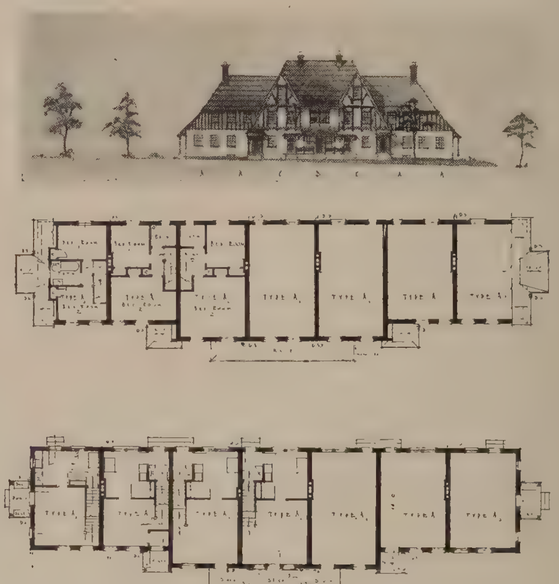

DEVELOPMENT · FOR · THE · HOLSTON · CORPORATION · ERWIN · TENN ·
GROUP OF FOUR 6 OR 7 ROOM HOUSES
GROSVENOR ATTERBURY ARCHT
NEW YORK CITY

23. Group of four six or seven room houses. Development for the Holston Corporation, Erwin, Tenn. Grosvenor Atterbury, Town Planner and Architect.



25. Group of houses. Development for the American Hard Rubber Company, Akron, Ohio. Prentice Sanger, Landscape Architect and Architect.

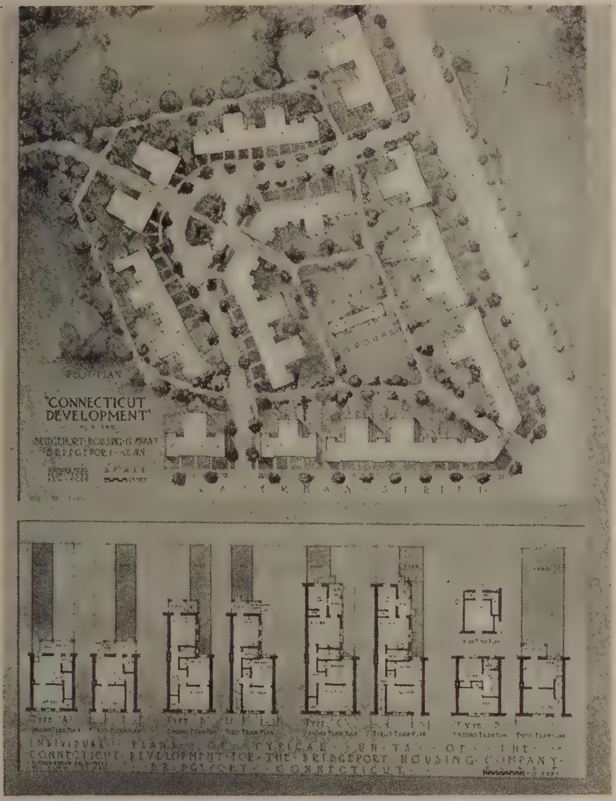
Numberless single houses of totally different styles lined up on gridiron streets, present an aspect of monotonous unrest which is unconsciously irritating. On the other hand, endless rows of houses with "Queen Anne fronts and Mary Ann backs" are consciously unsatisfactory and hopeless. The single house, the semi-detached house, and the row house each has its place, and their judicious combinations, such as are exemplified in Illustrations 12, 13, 23, 24, 25, give the entire community a restful harmony which communicates its spirit to the people within its limits.



24. Multiple house for seven families. Development for the American Hard Rubber Company, Akron, Ohio. Prentice Sanger, Architect.

The arrangement of types for row or terrace houses differs somewhat from the designing of the detached house, because of the necessity for securing all the light and ventilation from the front and rear. The inside-house plan is limited to two or three most efficient types, according to the number of rooms required.

One of the best arrangements of the four-room inside house is shown in Illustration 12, with a combination kitchen and dining-room. The working surfaces are well placed. The stairway might be an open one going up from the living-room, as in Illustration 24, inside house, but this would make the house more difficult to heat. Because of this and the discomfort from drafts, the open stairway, except in a stair hall, is going into disfavor. Illustration 24, inside house, provides for the refrigerator in a most satisfactory manner. In either of these schemes the types may be used in rows indefinitely, according to the exterior desired.


"CONNECTICUT DEVELOPMENT"
INDIVIDUAL PLANS OF TYPICAL UNITS OF THE CONNECTICUT DEVELOPMENT FOR THE BRIDGEPORT HOUSING COMPANY BRIDGEPORT CONNECTICUT

26. Community plan and unit house plans. "Connecticut Development" for the Bridgeport Housing Company, Bridgeport, Conn. Schenck & Mead, Architects and Town Planners.

Illustration 13 shows a five-room inside house with a recessed porch, doing away with the necessity for a vestibule and making a charming, snug entrance. After all, does not the secret of the design of the porch lie in making the porch a part of the house instead of treating it as applied ornament?

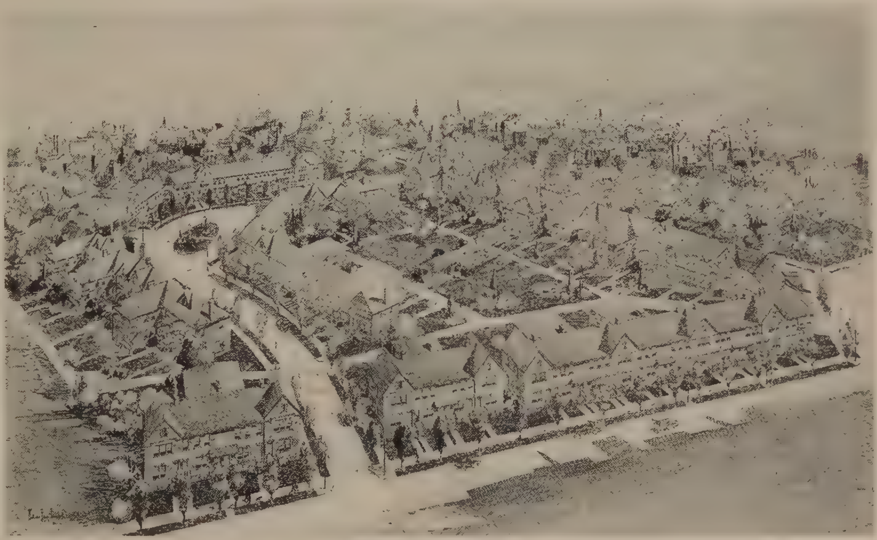
The typical "Philadelphia Row," with its abomination of deep, narrow courts and light-shafts, is an acknowledged thing of the past. The other extreme—houses but two rooms deep, sanitary, comfortable, built in rows of more than three or four houses, is very difficult to treat architecturally; neither will it always allow the necessary intensity of housing.

Between this and the use of the tenement, which should be considered only as a last resort, is a unique scheme of grouping used in the Connecticut Development at Bridgeport, Conn., which eliminates the evils of the typical row house referred to above and affords the same family privacy as the detached house. There are four different types of plans, including two, three, four-room flats and five-room houses. The success of this scheme lies in the forms of these types and the method of combining them in the different groups, as shown in Illustrations 26, 27. The result is a picturesque layout which has none of the monotony of the row types of uniform depth and which houses over twenty-seven families to the acre.

This scheme of grouping has been approved by the Bureau of Industrial Housing of the U. S. Department of Labor and is being seriously considered for use in connection with the housing of government employees in Washington during the war. It is peculiarly adapted to the general city plan of Washington, where the city blocks are large and cut by service alleys. (See Illustration 28.) The alleys are made straight and continuous through the block, so that they will be easily policed and cannot degenerate into the slum conditions of some of the neglected blind alleys in other parts of the city.

Building materials is a subject in itself and cannot be discussed here, though it is a prime factor in the design of the small house. To the credit of the material men may it be said that they have gone into the matter of the small house with a true spirit of research and are making splendid contributions toward its development. As a result there are many creditable new methods of construction on the market. But they have made the mistake of considering that they are, as a class, sufficient unto themselves and have not shown proper co-operation with the architects. They begin at the wrong end and expect the houses to be designed to fit their units of construction, instead of making their construction adaptable to houses of good design. None of these patent schemes has yet equalled brick, which has borne the tests of time for adaptability and ease of handling.

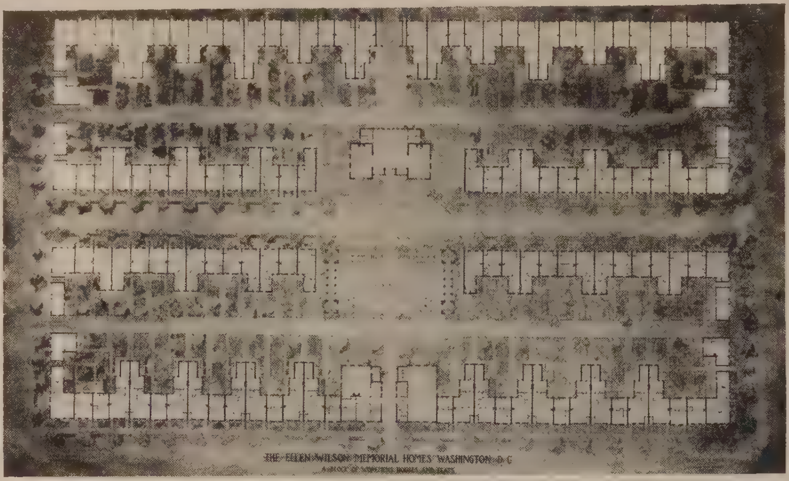
There are also several building firms throughout the



27. Perspective sketch. "Connecticut Development" for the Bridgeport Housing Company, Bridgeport, Conn. Schenck & Mead, Architects and Town Planners.

country who are doing good business in the sale of ready-cut houses. There are great possibilities in the "standardized house," and there is no reason why a good design might not as well be standardized as a poor one. It is a cause for wonder that some of the beautiful woods that are used in these buildings do not cry out at the tortuous shapes into which they are cut.

All of these things must be taken into consideration in building to rent or sell, in order to please the greatest possible number of people. A prominent labor man has said, "You may plan your comfortable, sanitary, beautiful house, and the workman will live in it or not as he may choose," which is true. In order to make the houses desirable, no effort within the limits of cost, etc., should be spared to design these small houses to meet the needs and requirements of the people who are to use them.



28. Group plan. Permanent housing for Washington, D. C. U. S. Department of Labor. Schenck & Mead, Architects and Town Planners.

The necessity for the government's taking up the matter of housing is a new idea to us, because we have not been in the habit of looking to our government for the solution of our local problems. But it is the only way to meet our national emergency. If we would win the war, munitions, ships—everything necessary for success—must be produced in quantities and with speed heretofore unthought of. We must have the best in the least possible time, which means that every worker must be kept in a condition of maximum productive power. No man who is not well fed, well housed, rested and amused during his recreation hours, will go to his day's work with an alert, enthusiastic spirit. Good housing will do most to assure these requisites.

Many mistakes will be made because of the necessary speed, but on the whole this work is being well done, and will result in permanent improvement in our homes and communities throughout the country. The boxy, gingerbread house will be relegated to the past, because the people will have been educated to something better, and the proper relation between productivity and wholesome, clean living will have been demonstrated.

Book Reviews

PLAN OF MINNEAPOLIS PREPARED UNDER THE DIRECTION OF THE CIVIC COMMISSION, MCMXVII. By Edward H. Bennett, Architect. Edited by and written by Andrew Wright Crawford. Large folio. Published by the Civic Commission.

This handsome volume, with its many illustrations, including some beautiful renderings in color by Jules Guerin, is a splendid tribute to the wisdom and foresight of the men who represent the commission. Here is the plan of the city beautiful of the future, the city of a million and more within fifty years.

The plan is not a mad dream but a carefully-thought-out one, "safe, conservative, and practical for the years to come."

"Minneapolis as a city has an individuality of its own. It was saved in its beginning from being a purely geometrical city of the checker-board type by its physical topography, the course of the river, and the direction of its earliest thoroughfares. The commission would be the last to desire any change in that individuality. Rather has it endeavored to preserve and increase, if possible, that individuality. It has not desired and would not desire to attempt any drastic remaking of the city; indeed, that would be impossible. All that any effort could possibly accomplish would be to attempt to forecast the future, to project oneself into the community of fifty years hence, and then with backward gaze attempt to see where and how and what plan now adopted would accomplish the best results from the vantage-point of natural conditions and natural growth.

"It is the commercial and officially designated financial capital of an empire greater in area than Great Britain, Germany, Belgium, Holland, Denmark, and Switzerland combined. That dominion, defined under the Federal Reserve Act of Congress, consists of the northern tier of the States of the United States from the Great Lakes to the Rockies. The undesignated domain of this city is yet vaster, and includes the greater part of western-central Canada and western Canada as well.

"This is the territory upon which Minneapolis will draw in larger and larger measure. The volume of its new citizens, already coming from many sources, will be augmented by a constantly increasing number from this tributary empire.

"The plan presented is to prepare Minneapolis for its inevitable growth. It is now a large city. The greater city that the future is so surely and so swiftly bringing must be a more economic, a more convenient, a happier and a more generally beautiful city."

David Maitland Armstrong

DAVID MAITLAND ARMSTRONG, artist, designer of stained-glass windows, and lawyer, died on the 26th of May, after a brief illness, at his home, 58 West Tenth Street, in his eighty-third year. With his daughter, Miss Helen Maitland Armstrong, Mr. Armstrong designed the memorial windows in churches and buildings in many parts of this country, among them windows in Ascension, St. Michael's, Holy Trinity, and Holy Communion churches in this city.

He was director of the American art department at the Paris Exposition in 1878, and received the decoration of the Legion of Honor. He was an Associate National Academician, a member of the Architectural League and of Alpha Delta Phi; a manager of the New York Institution for the Blind, trustee of the Society Library, and a life fellow of the Metropolitan Museum of Art. He also was a member of the Century Club.

A son, Hamilton Fish Armstrong, joined the colors, and is serving in the heavy artillery.

Goldwin Starrett

GOLDWIN STARRETT, senior member of Starrett & Van Vleck, architects, New York, died May 9, at his home in Glen Ridge, N. J.

Among the important buildings designed by his firm were the Lord & Taylor Building, the Hill Publishing Company Building, and the new building completed at Court and Remsen Streets, Brooklyn. Mr. Starrett's brother, Paul Starrett, is president of the George A. Fuller Company, and another brother is Major William Starrett, a member of the Council on National Defense at Washington, who is the architect of the National Army cantonment buildings.

Editorial and Other Comment

Building for the Future

WE are all thinking of and following the country-wide development of industrial housing, and some of us in studying new developments are wondering at the wretched taste shown here and there and at the evident controlling influence of the idea of building merely for to-day. Thousands of homes to be built, new towns entirely given to the needs of industry, blocks and blocks of homes built with the idea of transient occupation only, poorly designed and poorly built; from an investment point of view about as substantial as some of the war-baby stocks. And yet there is every reason to expect, with the ending of the war, an industrial expansion beyond any present calculation. Some of these housing schemes in five years will look like one of the French towns through which the Huns have tramped.

Industrial greed has no place in these days when, as never before, men are equal, the workman of the factory beyond the draft doing his bit with the same patriotism and service as the man in khaki. We are all looking for opportunities to show our soldier boys how well we think of them, the best is none too good, and in building homes for our workmen we should manifest the same spirit. If we are to Americanize the millions of foreigners who work in our mills, our mines, our factories, we can do no better service than to show them how to live as Americans should live. Much of the sordid indifference to decent living in our great factory centres has been due to the herding of human beings in old tenements and in so-called two or more family houses that would be but poor accommodation for families of neat and tidy pigs. There is no greater influence for good than decent home environment, and with the building of our new towns of industry we should at the same time establish civic rules that would enforce a certain standard of up-keep to fit the majority of self-respecting families who take pride in occupying and owning their own homes.

There doesn't seem to be any sufficient reason why we should not develop and reconstruct our industrial towns with some of the charm and practical usefulness that has been shown in so many places in England. Let us build for the future, not for to-day, and merely as a business proposition there would seem to be no need for argument that this is worth while. Miss Mead's presentation of the housing problem in this number is especially comprehensive and suggestive of the right way.

Work to Do Now

WITH the suspension of nearly all general building construction many architects may find a way to turn their attention to the work of making old houses new. In the May number we showed a number of alterations of old city dwellings that not only added greatly to the sightliness of the streets but added as well very considerably to the income value of the properties. We are all much indebted to the initiative of Mr. Frederick J. Sterner, whose first work in East 19th Street, New York, in the Gramercy Park neighborhood, led the way to many similar developments. Mr. Sterner built himself a home there, which he sold later, and now has started a new development of a simliar character in East 62d and 63d Streets.

Any one who will take the time to look at some of these new-old houses will appreciate what opportunities they offer in these days of stress to architects of taste and enterprise. Here is work at hand, and even with the high cost of building to contend with it will not be hard to give facts to owners to prove the wisdom of such enterprises. In no part of New York City has the idea been more quickly realized than in what is familiarly known as Greenwich Village, a more or less indefinable part of the city below 14th Street that, in spite of some cheap and spurious notoriety as an American-Latin quarter, is becoming increasingly desirable as a quiet residential district. There are old houses there that used to rent from $1,500 to $2,000 a year that have been made to yield incomes from three to five times as large on an outlay of only a few thousand dollars.

Making over of old buildings for commercial purposes into attractive stores, studios, and offices can be made even more profitable. Mr. Pendleton's article in this number gives some significant examples with accompanying figures. There isn't a city in the country, large or small, where this kind of work cannot be developed with profit even in war times.

The following editorial appeared recently in the *New York Tribune:*

> Of the many unusual situations developed in our living and business conditions since the beginning of the war, probably none is so important and startling as that governing construction. War conditions entered the building market as early as 1914, when material prices started the skyward trip that is still in progress. Each succeeding year since then building has steadily diminished, and the country's population is gradually getting beyond its housing facilities.
>
> Something will have to be done to improve the already seriously inadequate housing facilities in and around New York City.
>
> Apparently the only relief to be provided lies in the reconstruction of buildings that have either outlived their usefulness or fail to yield the incomes that war-time conditions require. A start has already been made in this direction. Old dwellings are being steadily converted into apartments and tenements, and business buildings that seemed ready to be scrapped are being overhauled and modernized.
>
> New York has a wonderful collection of building "antiques," and will afford a lively field for inactive builders in the new field. The rehabilitation movement will, of course, fall far short of meeting the needs. But if the trials of this unusual period result in a general betterment of present housing facilities they will not have been without their reward.

Are Architects Practical?

A letter to the editor of ARCHITECTURE from an architect who was at the Beaux-Arts, who was later the director of one of the leading schools of architecture in America, and who is now wondering whether he belongs to a non-productive industry.

I WAS greatly interested in the report of President Mauran of the American Institute of Architects, in which he quite properly finds fault with the architects as a class for their indifference to political and social problems in their own communities. He refers at the same time to the fact that engineers have been placed in positions which could have been filled equally well or more satisfactorily by architects. I am not aware that engineers have taken a greater interest in civic betterment or in sociological problems than have the architects, and am forced to conclude that the reason for the apparent lack of faith in the architects is because of a feeling in the public mind that they are not practical, and, also, that an engineer, being a constructor, or a handler of so-called "practical" things, like piping and machinery, is therefore a practical man. Certain engineers, notably those who have been connected with the laying out of towns, the building of roads, sewers, etc., have, through such connections, been regarded as experts in the far more vital matter of planning, *i. e.*, conceiving of towns. Doubtless there are many such engineers who have deluded themselves with the notion that because they have carried out the plans of others they have learned how to plan. Contractors have been known to harbor secret ambitions to plan and design buildings because of their familiarity with the plans and designs of architects. The public is evidently not yet aware of the fundamental point that a building or even a town may exhibit perfection in the so-called practical things, such as construction, heating, drainage, etc., and still be a failure as a building or a town because of bad planning. We have failed to educate the public in the essential importance of plan. I do not mean by that that we should try to tell the public the traditions of planning as applied to a single building or a group of buildings; that we should spend any time in trying to explain what is meant by an axis or by any other familiar term used in schools and offices. Instead we should develop among ourselves the habit of building up a programme based upon a survey of conditions, and we should see to it that such a habit is "architectural." If we become known as men who diagnose a case only after exhaustive studies of symptoms, we shall have the respect of the community such as that enjoyed now by eminent surgeons. What do we do now as a class without considering specific exceptions to the contrary? In residential work we are apt to approach a problem with a design or a type in mind which we hope and expect to apply to the problem. What is the result? Frequently a plan which only partially satisfies the conditions of the problem. In town planning our tendency has been to begin by saying: "Well, every town should have a civic centre." So we begin by establishing a civic centre (we like the alliteration) just as the academic type brought up in an ultra-academic atmosphere follows the maxim: "When in doubt play a cartouche." As a class we are *not practical* because we do not approach our problems in a practical manner.

Now there must be a reason for this one-sided development. I believe it can be explained as a reaction from the stiff engineering training which was taught in most of the schools of architecture twenty or thirty years ago. In those days we spent so much time on analytical geometry, calculus, mechanics, stereotomy, and other applications of higher mathematics we not only had very little training in plan and design, but what we had was very bad. The engineering atmosphere so thoroughly permeated the schools it was usual and customary for students to do all of their work with hard pencils having needle-like points. Then the Ecole des Beaux-Arts began to come to the front. As a national body we awoke to the great lack of architectural design in our profession, and literally from Maine to California we sent our young men to France to learn how to design. We followed this up by developing, through the Society of Beaux-Arts Architects, a great course of study, in which men from every quarter of our country learned how to turn out plans, elevations, and sections in what may be termed the best Paris manner. The schools were brought into line, and most of them gave their pupils the Beaux-Arts Society's problems. Frenchmen of marked ability were imported to teach design. We have finally reached the goal of our ambition and have developed young men who, in the competitions for the Paris Prize, have produced sets of drawings which would look well and stand well in a "Prix de Rome" competition in Paris. All of this is written in a belief that this has been a logical and an inevitable development. We were weak in design; we have now become strong in designers. In the meantime, however, the public has been a witness, year in and year out, of the stress laid on design. It would not be strange if the man in the street had received the notion that architecture is largely a matter of design. Doubtless a large element in the public knows nothing of the exacting rôle of executive which the average busy architect fills; how he spends his days directing the work of others, having little time in which to personally work on drawings.

It seems to the writer that the pendulum has swung about as far as it can go in this direction toward design and that it is our problem now to direct the pendulum in its return swing toward elements far more vital than design. Mr. Mauran hinted at it when he referred to the need of our getting into the local political and social problems. Mr. Ackerman has written forcefully on this theme and has much more to say on the large subject of architectural education. The schools have hitherto followed what they believed the profession required. Will they be equal to the task of leading the thought in the right direction? Design has occupied the central place in the curricula of schools and societies. We must always train men to make beautiful drawings. The fundamental principles of good proportion, good scale, and good color must never be lost sight of. But we are approaching, have even reached the point where all this technical training must be preceded by a training of the thinking powers to the end that a student in architecture may possess a view-point more mature and of wider range than has ever been a part of the mental equipment of the average student in the past.

It will take time to work out this great change in our own conception of an architect's education. It must be done, however, if we are to expect the full respect of the public. It is easy enough now to get the public to admit that we are designers. Our ability to create beautiful buildings has been demonstrated. We must now prove that we are practical, and I do not mean by that that to be practical we must drop the soft pencil and assume an engineer's view-point. I would accentuate the thought that the word "practical" does not imply the ability to build or to make a pipe connection or to use a transit or to add a column of figures. In a small office dictionary at my elbow the word is defined as follows: "Capable of applying knowledge to some useful end." There is no member of society more capable of being practical than an architect. Many architects are, above all things, entitled to the honor of being called practical as defined here. The public, however, has not recognized this fact.

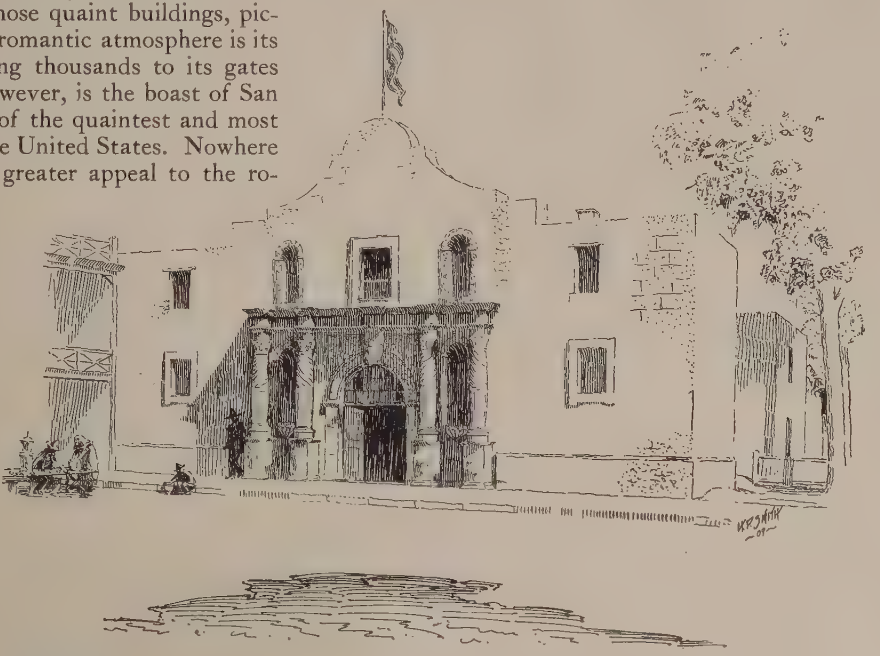
Alexander B. Trowbridge.

An Architect's Impressions of Old San Antonio

By Harvey Partridge Smith

Illustrations by the Author

THE charm of an old city lies chiefly around the historic spots and buildings in which the romance of its early history is centred. Rarely do we enter a city that can boast of ancient edifices and haloed ground, the history of which is known the country over. Rarer still is the community whose quaint buildings, picturesque scenes, and romantic atmosphere is its main attraction, luring thousands to its gates each year. Such, however, is the boast of San Antonio, Texas, one of the quaintest and most interesting cities in the United States. Nowhere else may you find a greater appeal to the romantic and the picturesque and have such hospitable welcome extended you; nowhere will you find such a blending of the ancient with the modern as in this delightful city of our own Southwest.



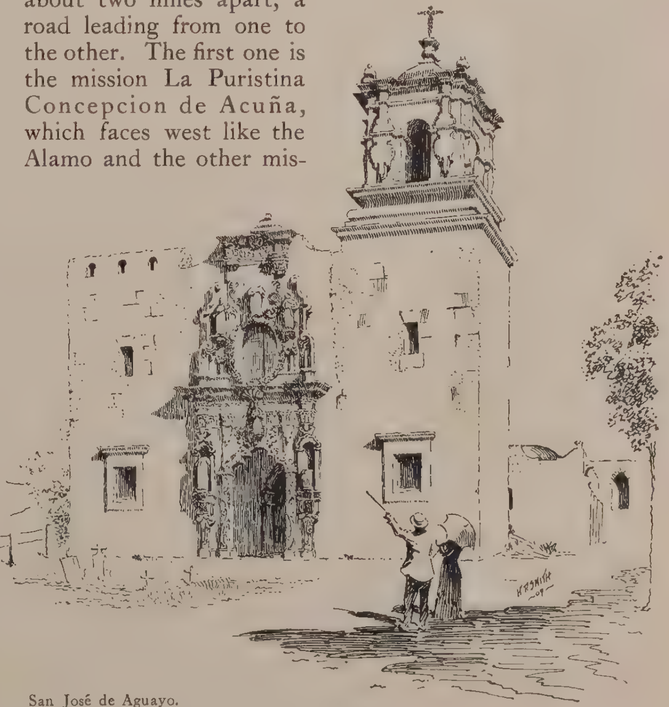
The Alamo.

You may be surprised to learn that it is the second oldest city in the country, having been founded in the year 1715 as a Spanish military garrison. The entire garrison at that time was contained within a stockade surrounding what is now known as Military Plaza or Plaza de las Armas. The city hall now stands in the centre of this historic square. On the east edge of it, between this and Main Plaza, is the old San Fernando Cathedral. It is the low, massive chapel in the rear with its blue-gray limestone walls and buttresess that served the garrison in its earliest days.

If you are in the city but a few hours or a month you will not miss a visit to the mission San Antonio de Valero, otherwise known as the Alamo, the haloed spot so sacred in the hearts and memories of all loyal Texans. It was founded in the year 1716, but the corner-stone was not laid until May 8, 1744. To look at the modest little building you would never think that here took place a fight the like of which has never been surpassed and seldom equalled anywhere else in the world. It is situated at the northeast corner of Alamo Plaza—the very heart of the city. At the time it was built the "mission" comprised a stockaded square which covered the largest portion of the present plaza, a quadrangle, granary, and monks' cells—the walls of which still stand, adjoining the church on the north. And lastly the church itself, now known as the "Alamo"—Spanish for "cottonwood"—there being a grove of cottonwoods near by.

The plain little building is not very attractive architecturally, there being only the main entrance in any way interesting. Originally the Alamo had two towers, but these, with the roof and a goodly portion of the walls, had fallen in many years prior to the famous siege. Afterward when United States troops used it as a garrison the walls were built up to their original height and a new roof was put on, but the towers have never been rebuilt. The plan of the building is that of a cross with the chancel in the east end and the main entrance opposite—at the foot—the transepts forming the arms of the cross. The interior is just plain stone walls and dirt floor but now contains a little museum of relics.

This one historic building in itself would be enough to attract professional interest from all over the country, but San Antonio boasts of four other old missions in addition! The others are located to the south of the city about two miles apart, a road leading from one to the other. The first one is the mission La Puristina Concepcion de Acuña, which faces west like the Alamo and the other mis-



San José de Aguayo.

sions. It was founded in 1716, but the building was not begun until 1731. It is extremely plain but dignified and massive in appearance, and is the best preserved of all the missions. The main ornamentation is a simple triangle over the entrance doors. Once the entire façade was painted in brilliant colors, but now these have nearly faded away. Two stained-glass windows above the entrance are the only panes of glass in any of the missions. The twin towers, ornamental parapet, and dome over the chancel—that is decidedly Moorish—make a majestic outline against the sky.

Street scene in Mexican section.

The church records of Concepcion's palmy days read like a novel, so numerous and interesting were the activities of the little community. Religious services are still held in the church, to which the simple-minded Mexicans, who live in huts near by, attend with the same implicit faith and devotion that the Indians showed in its early years. Soft limestone was used in the construction of this church and in that of San José, and was quarried just across the road, where the pit may still be seen. The mission square, with its encircling walls and the barracks, granaries, and outbuildings, have entirely disappeared, but the arcade and part of the padres' living quarters still remain to give an idea of the extent of the one-time prosperous mission.

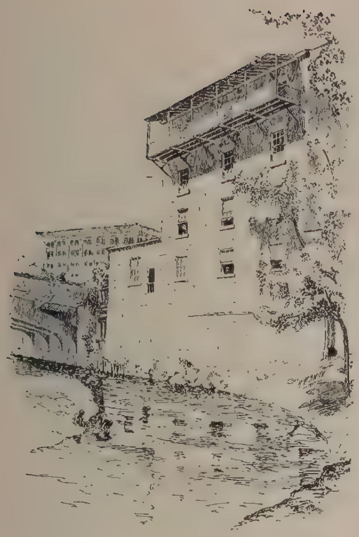
The Market House.

The second mission, or San José de Aguayo, is the grandest and most beautiful of all the missions, and was also the first to be built. Begun in 1720, it took eleven years to complete, and the day of its completion was made the occasion of beginning the Concepcion, the San Juan, and the San Francisco missions, March 5, 1731. It stands on the top of a gently sloping hill, commanding a fine view of the surrounding country. How impressive is that lone tower rising high above the massive walls which stretch out in a long line and end with a series of arches! The building was built largely of adobe bricks, though great blocks of limestone were placed in the walls where ornamental features were desired, and these were carved by the architect himself—Pedro Huicar, a Spaniard whose ancestors had chiselled the delicate tracery of the Alhambra.

The main portal of San José is rich with beautiful carving, figures of saints and virgins, cherubs and sacred hearts, niches with shell-like canopies, ornamental pedestals and beautiful cornices. Other portions of the building are ornamented in a similar manner but not to so great an extent. There are three minor carved-stone doorways (one just recently unearthed), pilaster caps, fonts, and gargoyles, besides the gem of them all—the south window of the baptistry. This one piece of work alone is worth coming a long way to see, and is considered by connoisseurs to be the finest single piece of Spanish colonial ornamentation existing in America. Its curves and proportions are an ever-pleasing sight to the layman as well as the professional, and it is forever revealing some fresh and hidden beauty in leaf or mould. The carving is bold and daring, but exquisite in line and curve, with a freedom and freshness in its composition that denotes the hand of an inspired genius.

The belfry tower, which is about sixty feet high, has four arched openings and is topped with a pyramidical stone roof. In the angle made by this tower and the main wall of the chapel was a peculiar winding stairway of solid hewn steps to the second story of the belfry tower. From this level to the roof are unique stairs made of solid tree trunks, the steps having been notched out with an axe. In thickness the walls range from two to five feet, and the tremendous weight of the great vaulted stone roof makes us marvel at the skill of the men who raised them without the aid of modern machinery. And yet we learn that it was comparatively simple after all, though tedious. As the main walls were going up, dirt was constantly being filled in between them so that the huge stones could be moved into place easily. When the walls were completed the dirt was piled higher and rounded off and the roof built on top of the curved mound, each stone locked into place. When the roof was completed and the mortar had set the dirt was dug out from beneath and the rest of the building finished. For nearly two hundred years it had withstood the ravages of the elements, but one stormy night in December, 1868, the roof, dome, cupola, and

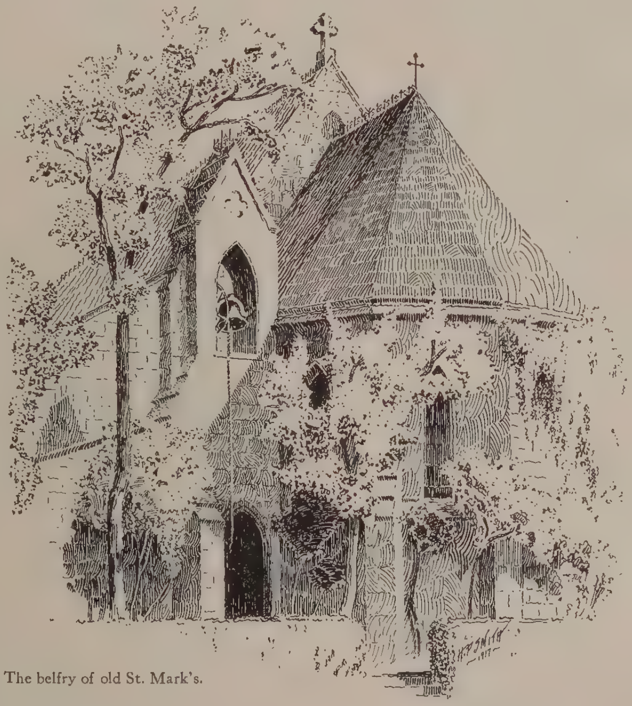
Old Spanish villa.



Old stone mill on San Antonio River.

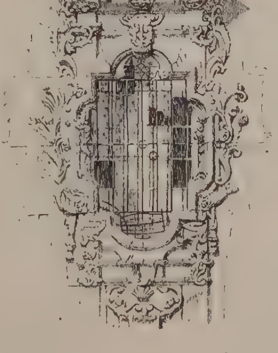
a large portion of the north wall fell in. This would not have happened even then had not some treasure hunters just a few days before thoughtlessly undermined the walls in their futile search for buried gold.

Happily for those of us who love these grand old monuments of the past, this one mission at least is being partially restored at the present time. Great piles of débris are being carefully removed and old walls are being built up of the original adobe. Across the road still stands the old granary with its flying buttresses that once formed a part of the quadrangle walls in the northwest corner of the mission square. It is interesting to sit there and gaze at the ruins and dream of those days when San José was at the height of its prosperity and usefulness and the "Pearl of all the missions in New Spain."



The belfry of old St. Mark's.

The third and fourth missions, San Juan de Capistrano and San Francisco de la Espada, are not so interesting as the others, for there is little left but four plain walls to each, the front one rising higher than the others, in which arches were cut and bells hung. Quite visible traces of the quadrangle walls are still to be seen at both of these missions. All of the missions lie along the course of the San Antonio River and all had wells within their quadrangles, but in addition the padres built irrigation ditches to provide water for the extensive mission lands. Between San Juan and San Francisco, across the Piedra Creek, is an old, fern-covered aqueduct on a series of stone arches, over which one of the irrigating ditches used to flow. These evidences of former prosperity and grandeur are gradually disappearing and not many years hence may be entirely obliterated, but the memory of them will remain with those of us who have seen them —always.



The baptistry window of San José.

Having visited the missions, the next point of interest in our quest for the picturesque, hidden away amid the modern stores, office-buildings, residences, and million-dollar hotels which have sprung up in the past ten years, is the Mexican quarter on the west side of the city. Here you are transported once more into a decidedly foreign atmosphere. The old stone and adobe huts, white-plastered with deep reveals, are sprinkled here and there among the greater proportion of flimsy frame shacks patched with tin cans, old boards, cloth, or any material which came to hand.

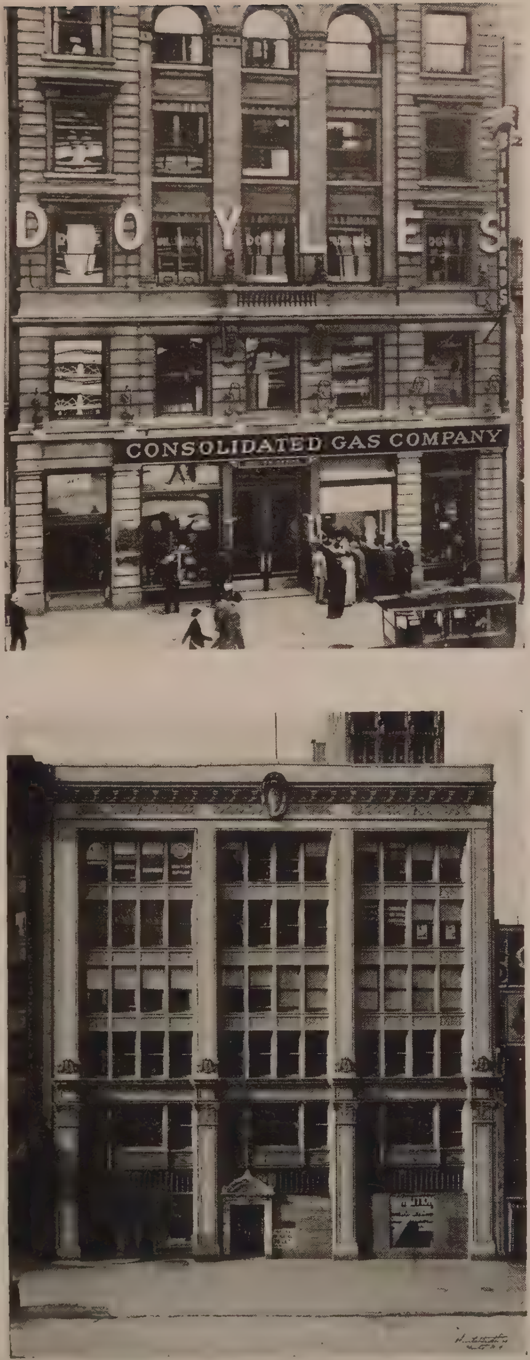
In the heart of this district stands the old Market House, about which centres a good deal of the life, color, and activities of the quarter. To Haymarket Square, just back of the Market House, come Mexican wagons (drawn by burros or dilapidated horses) loaded with produce, poultry, hay, wood, and other articles for sale. Here gather the women of the district, buying their meagre supplies or selling drawn-work and trinkets. Here, also, you will find the chili queens at their tiny stands serving the hot chili to their customers.

Old Fort Sam Houston—locally known as the Army Post—is one of the most interesting and picturesque sights around the city. It is one of the largest in the country and is the base for all the camps roundabout, with their thousands of boys in khaki. There you will see the base shops, the base hospital, the great parade-grounds, officers' quarters, and the famous Quadrangle, which is now the headquarters for the entire southern division. In the centre of the Quadrangle stands the old stone clock-tower, a relic of early days. Many famous men and generals have climbed to its top to look over the surrounding country.

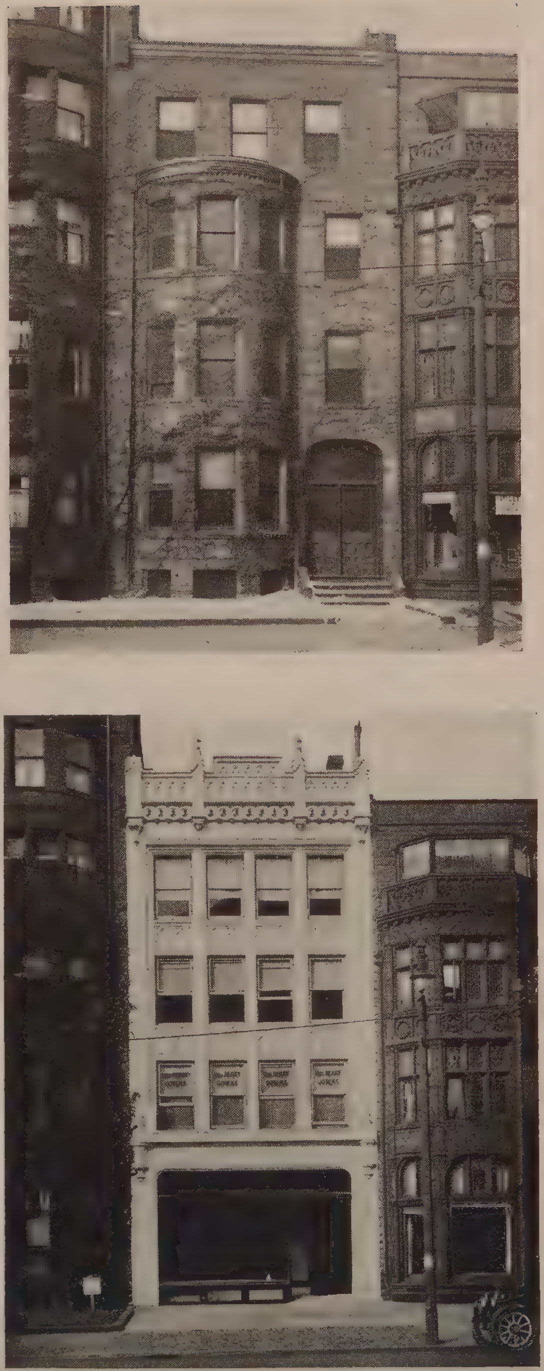
Leaving the Army Post, you will pass through a well-developed section of the residence district. The homes, mostly modern in character, are about the same as you will see in other modern cities, but tucked away here and there between these homes you will find many an old Spanish "casa" set way back from the street among verdant foliage and myriads of flowers.

Down by the river—jambed up against modern buildings on one side—stands an old stone mill over four stories in height, with a picturesque frame balcony overhanging the river at the top floor. It is ever a delightful scene to artist and layman alike, and has probably been photographed and sketched almost as often as have the missions. Not far from here, on one of the plazas, is a little old stone church whose Gothic belfry set in the angle formed by the apse with the main body of the building makes a striking picture, framed as it is by the branches of numerous trees.

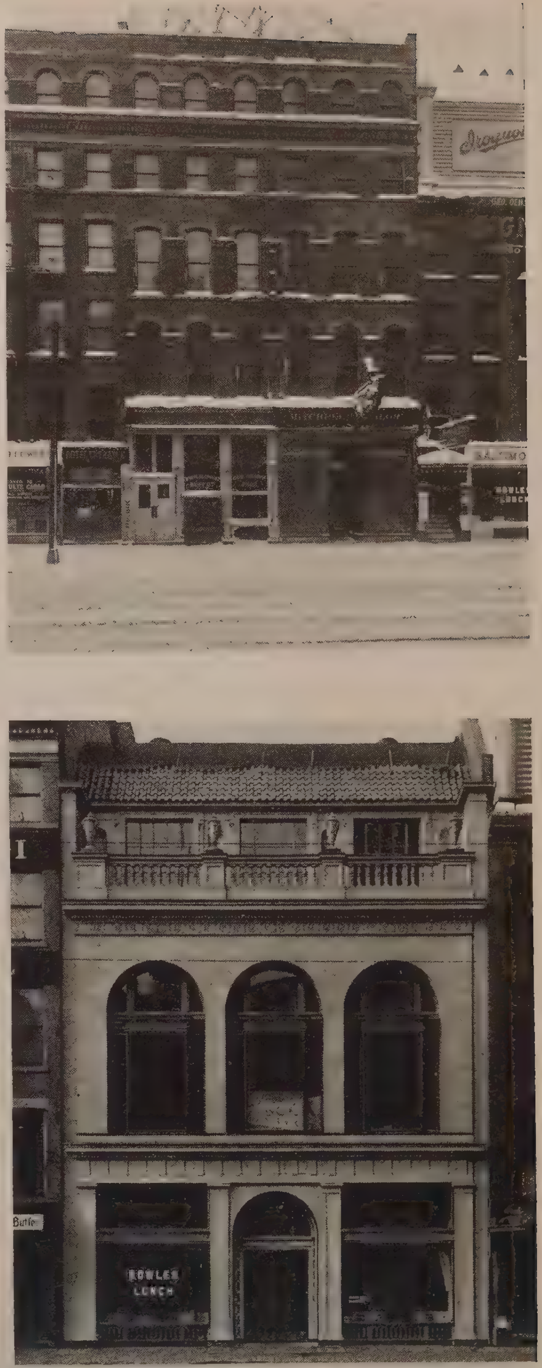
All over the city one runs across these quaint and picturesque old buildings set apparently at random amid all the modernity of a wide-awake city; yet seemingly these little architectural gems were placed by an artist, a lover of all that is beautiful and pleasing to the eye, just as he would place the high lights upon his canvas.



110 114 West 42d Street, New York. Alfred C. Bossom, Architect.
An improvement in light granite terra-cotta, costing (frontal only, not including glass, marble, or other minor items) $8,000 net, which certainly adds to the attractions of this thoroughfare as it must to the income from rentals.



651 Boylston Street, Boston, Mass. Henry Baily Alden, Architect.
An alteration of a residence building, crowded out by and unsuited for trade, transformed into an attractive building of combined utilitarian purposes, at a cost of $2,700 for architectural terra-cotta only.



Bowles Lunch Building, Buffalo, N. Y. Harris & Merritt, Architects.
A symbol of dilapidation transformed into one of real architectural merit, whose pleasing form is further enhanced by the use of polychrome color, the ornamental background very dark umber shaded out to a light cream at high points. Ashlon variegated cream matte, façade material, cost $6,000, not including glass, erection, or other minor items.

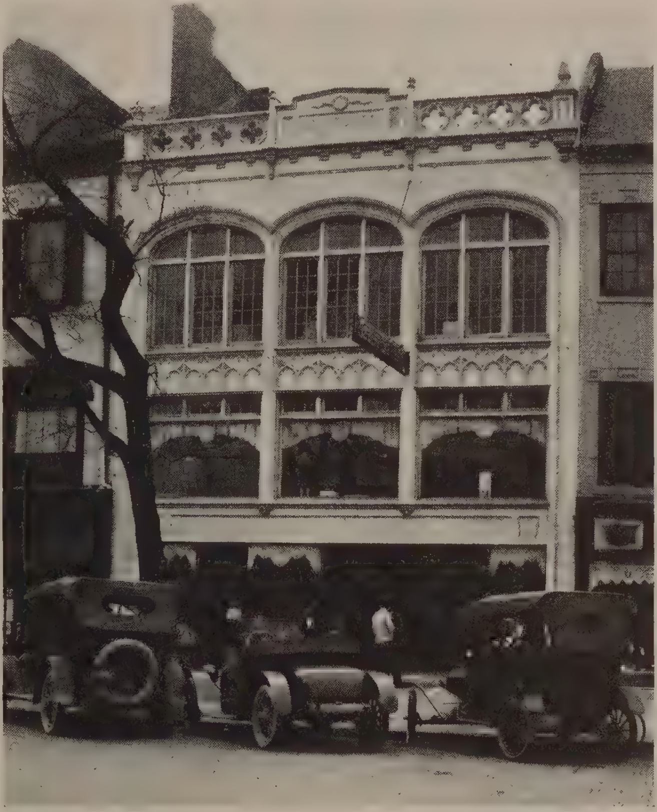
The Architect's Opportunity—Remodelling

By Arthur B. Pendleton

Executive Secretary, National Terra Cotta Society

DUE to prewar timidity, nearly all the cities and towns of the country are very much underbuilt, and are likely to remain so for some time to come, owing to the government's discouragement of large construction undertakings and the difficulty of securing financing from loaning institutions. In many localities this situation has become a very serious problem, because it affects adversely natural as well as stimulated growth, and has brought about a demand for housing of all classifications unprecedented in the history of the country, offering opportunities of tenancy at rental returning handsome profits. That a large part of these offerings could be easily absorbed through a more efficient use of properties cannot be denied, for one has only to turn to the rehabilitation of the dilapidated eyesores presented in the usually well-built but run-down buildings of medium size of a city, to realize the possibilities of solution of this problem through remodelling these structures into premises that will permit of respectable tenancy.

It is inconceivable that such a vast number of owners can read daily of the great demand for housing at handsome rentals, and continue to maintain premises in a condition which precludes the possibility of tenancy at rentals that will meet carrying charges, when the investment of from $2,000 to $10,000, which can nearly always be provided by the owner, would make what are now losses, income-producing properties.



Sylvester Building, Augusta, Ga. G. Lloyd Preacher, Architect.

An alteration from a building similar to those adjoining, that increased the business 35 per cent the first year; the assessed valuations from $25,000 to $30,000; taxes, $850 to $1,000; annual rental, $3,000 to $6,200. Costing (frontal only), $3,600, coming within $400 of paying for itself through increased rental the first year.

The consensus of opinion is that by far the larger part of this demand for housing will continue long after a cessation of hostilities, due to the activities brought about through large demands on this country for every class of merchandise, and as it has been demonstrated many times that these alterations pay for themselves through increased rentals, often within the first two years, they present a very attractive investment for a small sum of money.

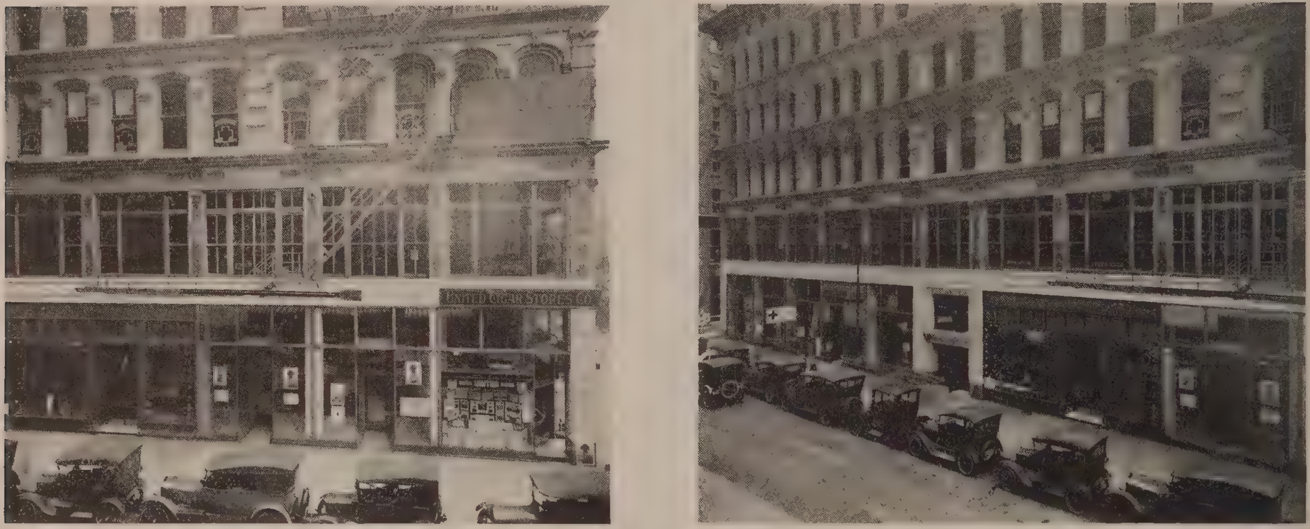
From the architect's standpoint, these operations have not held forth much attraction in the past, for many architects' organizations have been so constituted that they were not equipped to handle occasional alterations profitably, but the utter absence of construction, and the resulting necessity of retrenchment, has worked changes in organizations to such an extent that to provide for the handling of a volume of this class of work would be no hardship, rather would it become a source of profit and a medium of gaining desirable clients, for the owners of small properties are frequently the owners of large ones who will at some time undertake large construction, and an architect who had planned well in one direction would very likely be remembered in another.

Once the owners of dilapidated, untenantable property become convinced of the wisdom of improvements, the increased remodelling operations would provide a steady source of work that would fill in between commissions for large constructions, and enable architects to hold together their organizations and draftsmen, a very large number of whom in the past have been, so to speak, a floating population.

The present deplorable condition of the construction field provides the architect with an opportunity and time to acquire a knowledge of how to get and handle this work at an overhead that would make it attractive to him.

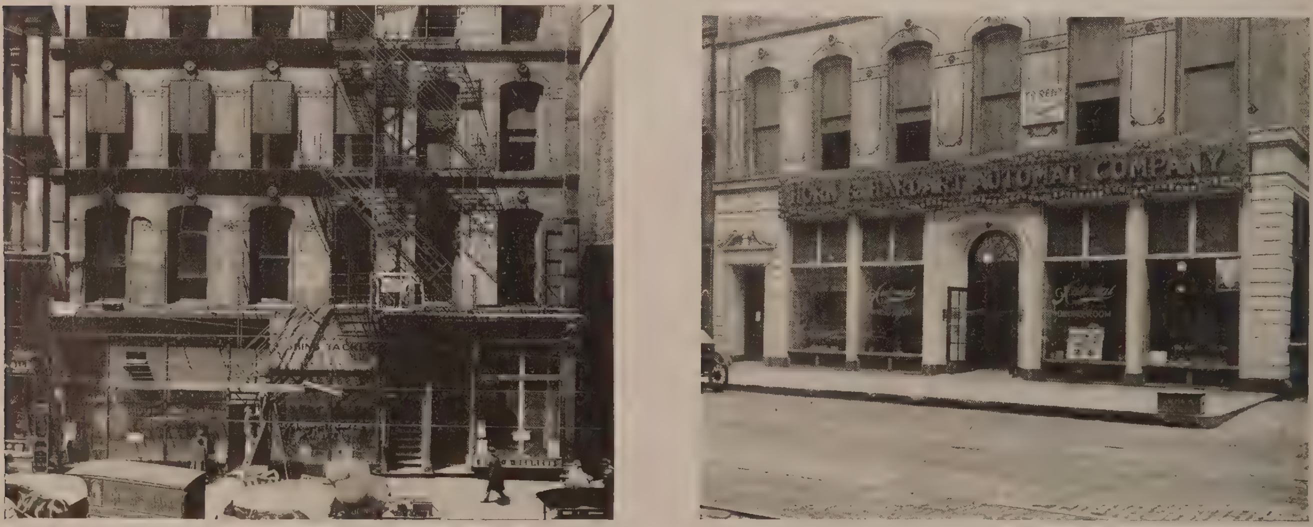
One method of getting it is provided for in the co-operation of the real-estate brokers who have innumerable discontented clients, owners of non-producing properties, and the concerted persuasion of both architect and real-estate broker should, if wisely administered, transform discontentment into contentment for all concerned.

Another method is the assignment of draftsmen, not overbusy, or other employees, to ascertaining the location of old buildings capable of profitable alteration, and the owners' names, and through the use of photographs of "before" and "after" appearances, cost, increased assessed valuations and rentals, as well as testimony of store occu-



Chicago, Ill.

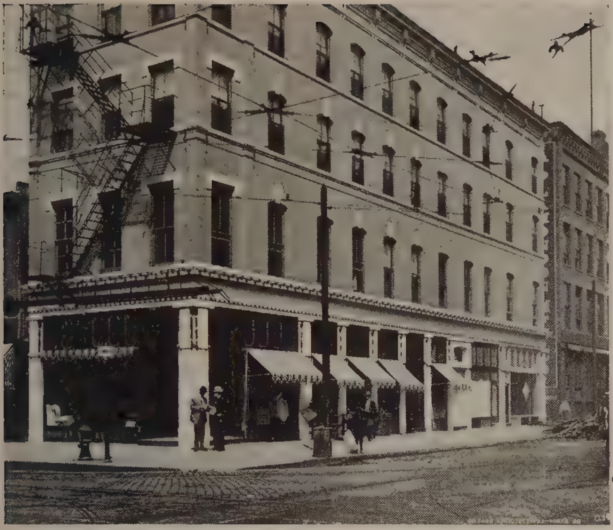
A two-story method of trade alteration of a large building. Note the contrast of first story, which has been washed clean, with that of second story, portraying the value of clean, respectable premises as a trade-attracting asset.



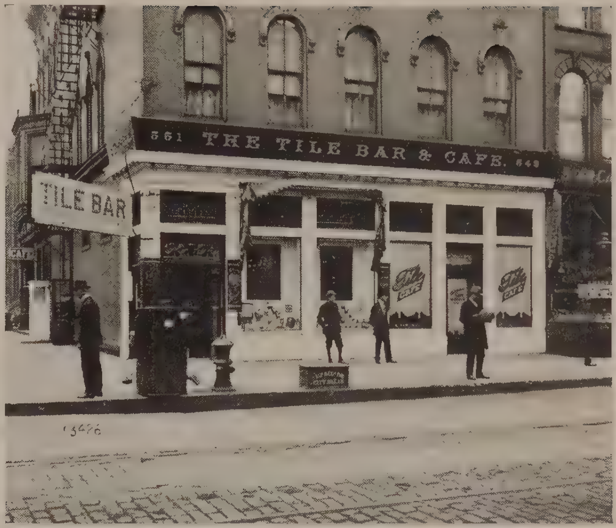
Horn & Hardart Automat Co., 116 North Dearborn Street, Chicago.

Remodelled with cream satin enamelled terra-cotta with polychrome ornament.

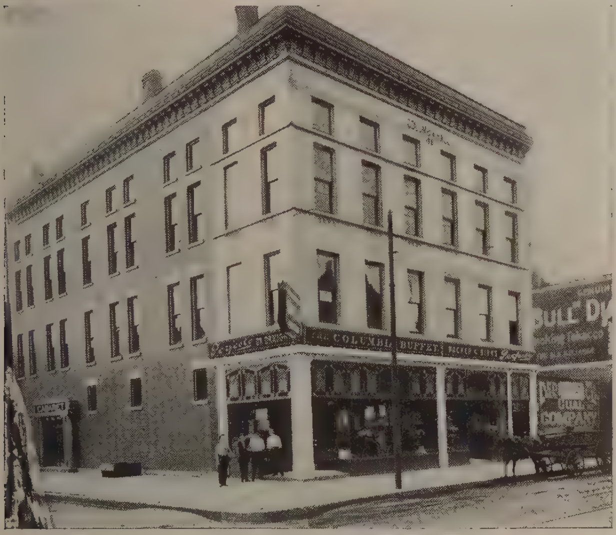
Marshall & Fox, Architects.

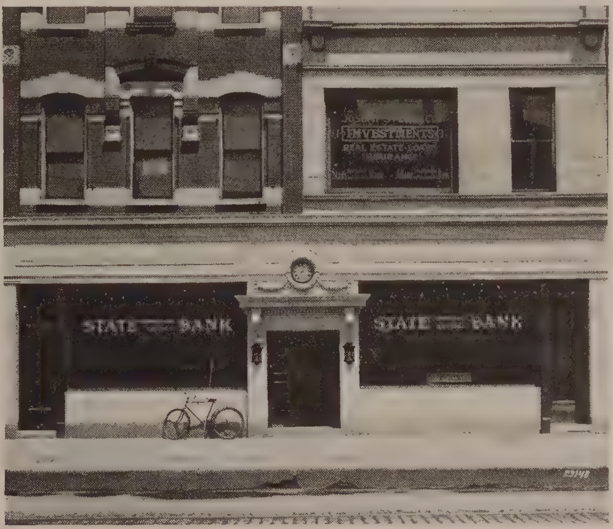


Cor. Madison and Clinton Streets, Chicago. H. L. Newhouse, Architect.

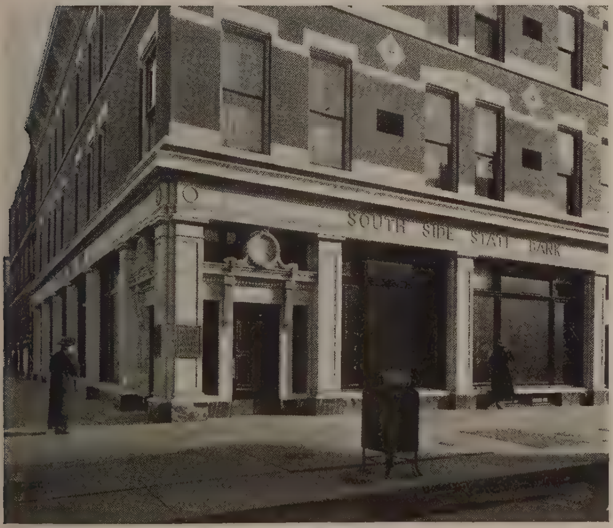


549 North Clark Street, Chicago. Wm. Ganger, Architect.
White enamel terra-cotta.

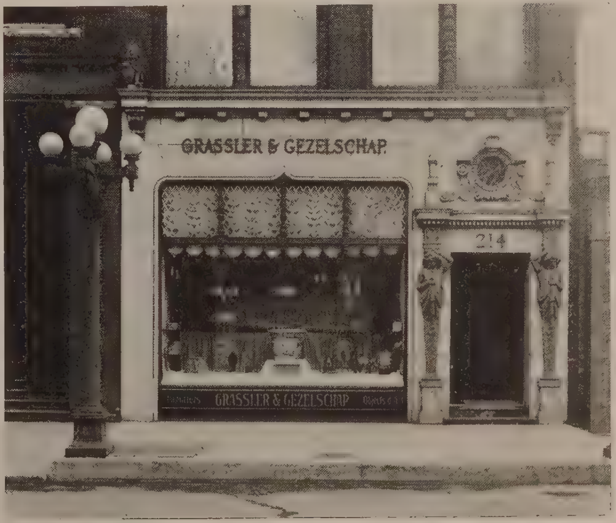




Chicago, Ill.



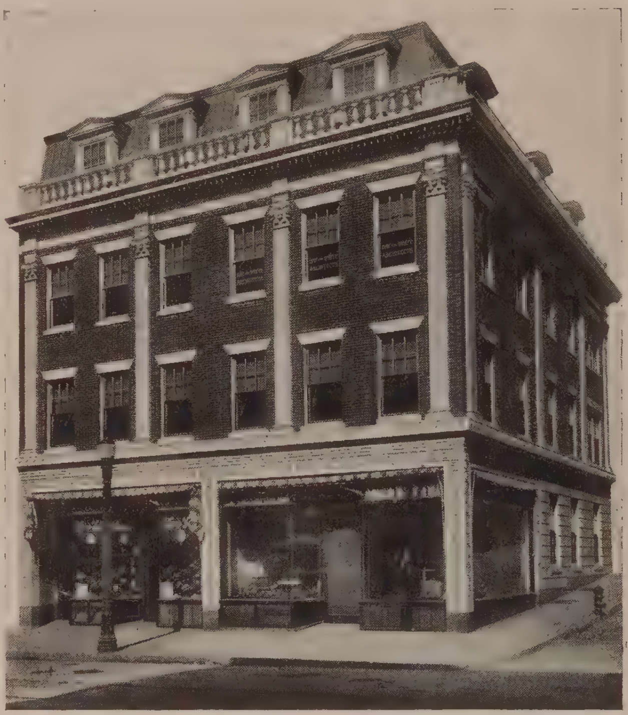
Cor. 43d Street and Cottage Grove Avenue, Chicago, Ill.
Cream semi-glaze terra-cotta.



Grassler & Gezelschap, Store, Milwaukee, Wis. Schnetzky & Son, Architects
The design is fitting and elegant, and the execution in enamel terra-cotta makes this store front a work of art, as unique in its way as the "objets d'art" inside.

pants as to the trade-increasing value of respectable appearances of improvements already made, have little difficulty in acquiring new clients destined to become customers.

Embargoes, car congestions, scarcity of some materials, and numerous other restrictions, make the question of delivery a very important factor in any undertaking, and an improper conception of the true market condition at the present time has tended to postpone many undertakings which under other circumstances would have gone ahead. To be sure, steel is hard to get, as are many other materials, but in these alterations steel need not be used, for they lend themselves admirably to masonry constructions, with exterior surface of architectural terracotta, or brick, both of which are available in sufficient quantities to meet any demands likely to be made upon them. In the case of the former, there is hardly a large construction centre in the country where it is not manufactured either within or close by the city limits, which in itself assures prompt delivery; while the latter is manufactured at widely distributed points, and sometimes stocked.



Haverhill Electric Co. Building, Haverhill, Mass. James T. Ball, Architect.

A non-income-producing, ramshackle building transformed into a thoroughly pleasing conception of colonial architecture at a cost (trim only, not erected) of $5,500. Note the comparison of rentability.

Present price levels of these materials need not be a hindrance, for there is little likelihood of a recession in prices either in the immediate future or at the end of the war; it is more likely that advances will be made due to economical conditions demanding them.

Aside from the monetary aspect, the fascination of transforming eyesores into beautiful premises and the satisfaction of seeing symbols of decay emerge from their temporary sheathing of scaffolding, revealing delicately modelled ornaments, medallions, pilasters, caps or cornices, or touches of color wherein the sombre monotony of dinginess prevailed, is surely a compensation in itself well worth the effort; and the architect who encourages this, a more sensible use of properties, is performing a praiseworthy public service, for he is assisting toward a more beautiful community, a greater taxable resource, and a more useful citizenship, through increased earnings.

Building Operations Behind Other Years

THE seriousness of building shortage is best illustrated by statistics covering construction work in this country for the Aprils of every year since 1911. The figures show a great falling off in cost and naturally in volume during April of this year, despite the fact that the need of buildings has increased considerably, due to the increased demands made by manufacturing and general business interests of the country. According to Bradstreet's review of the spring market, building in ordinary non-Government lines—that is, house, office, and factory construction—is slack, never more so at this season of the year, when building is usually active. Compared with April of other years, April this year makes a poor showing, it being necessary to go back over a decade, to a time when less than half of the cities now reporting were recorded, to find a smaller total.—*The N. Y. Sun.*

A New Company

A NEW company has been formed, known as the Reliance-Grant Elevator Equipment Corporation, which consists of the Reliance Ball-Bearing Door Hanger Company, and the hanger department of the Grant Pulley and Hardware Company. This concern, which is represented in all the large cities in the United States and Canada, and has offices in the Architects' Building at 101 Park Avenue, New York City, will sell the goods manufactured by the Reliance Ball-Bearing Door Hanger Company, which includes the new Grant Elevator Door Hanger and the Russwin Automatic Door Controller. The company is in a position to supply all devices and appliances for elevator work, and the articles sold by them are well-known among architects, contractors, etc.

New Edition of Truscon Building Products Booklet

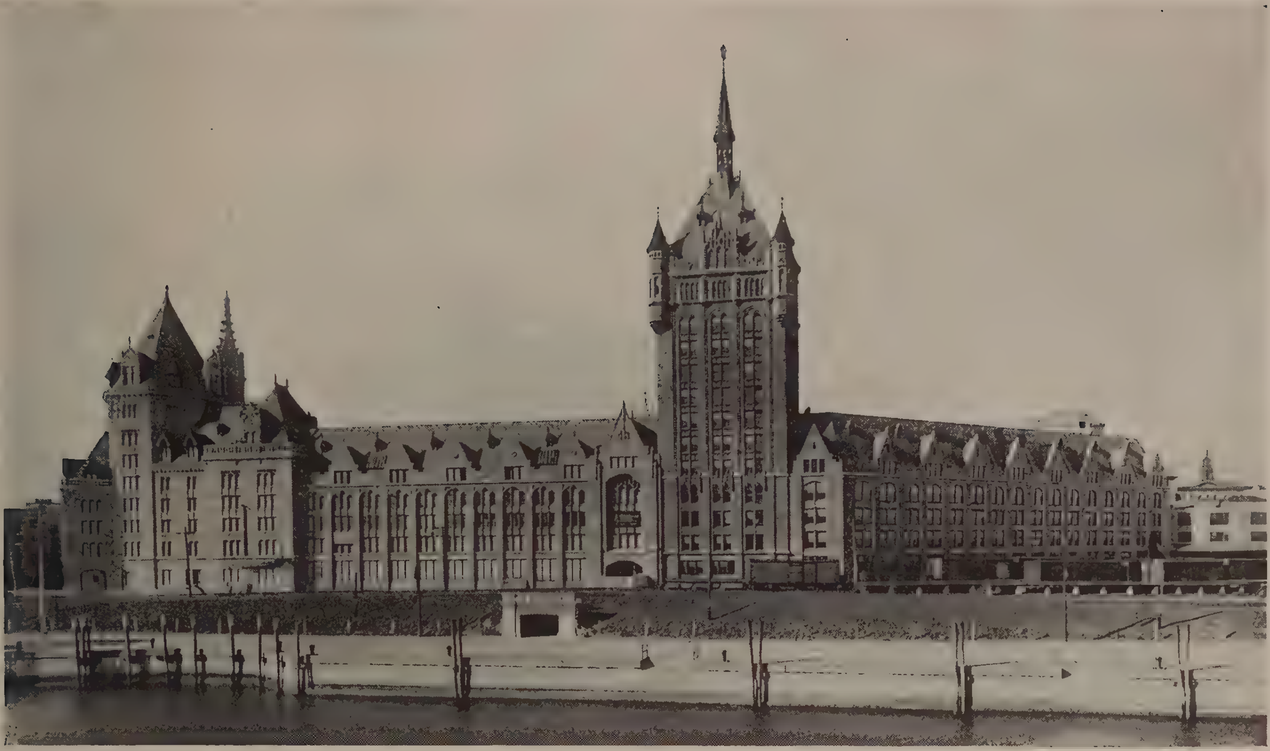
A USEFUL and convenient booklet, issued for architects and builders generally, is the 104-page book called "Truscon Building Products." The size of the book—3½″ x 6″—is such that it can be conveniently slipped into any pocket, yet at the same time it contains a fund of useful tables and building information.

It is a compact digest of the many elaborate catalogues published by the Truscon Steel Co. In it is contained complete information in regard to all their various products, together with tables of carrying capacities, strengths, etc.

Copies of the book will be sent free by addressing the Truscon Steel Co., Youngstown, Ohio, and mentioning this magazine.

Anniversary Portfolio of the 85% Magnesia

THE first anniversary portfolio of the Magnesia Association, under the general title, "Let 85% Magnesia Defend Your Steam," is a book containing the educational publicity regarding this insulation which has been appearing continuously during 1917 in many technical papers. A copy will be sent to any one writing to the secretary of the Magnesia Association of America, 702 Bulletin Building, Philadelphia, Pa.



Façade fronting on river.

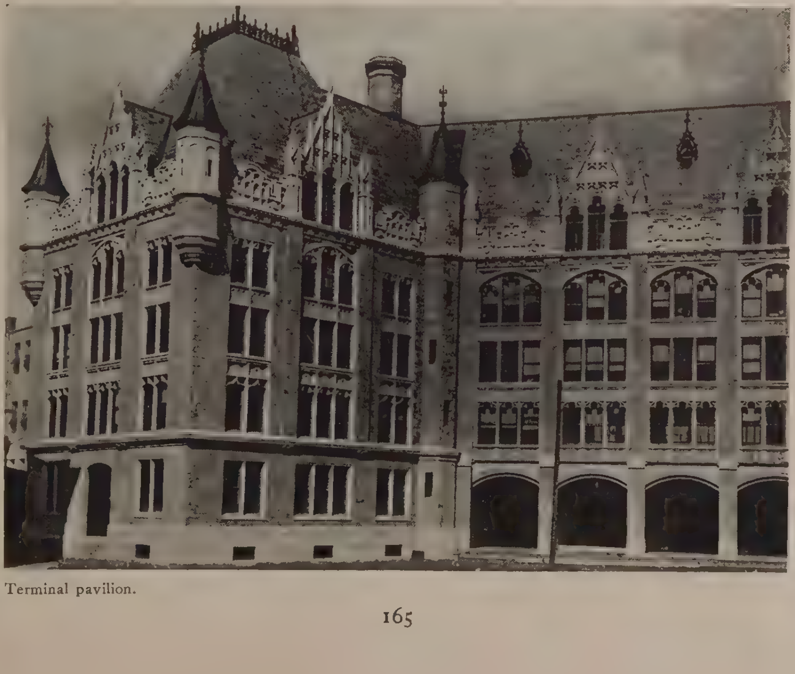
The Plaza at Albany, N. Y.

Marcus T. Reynolds, Architect

ON September 19, 1609, Hendrick Hudson completed his voyage of discovery where a stream entered the Hudson at the site of the city of Albany.

Fifteen years later Fort Orange was erected at a point some 800 feet to the south. It was here that the trading-post of Beverswyck grew up under the protection of the guns of the fort.

Cramped by the palisades with which it was surrounded, the streets were narrow and tortuous and the buildings mean and irregular. As the settlement grew the movement was to the north and west, and in the original area only those buildings which fronted on Broadway were of any importance. This street, the main entrance to the city from the east and south, was only 23 feet wide and was submerged by every freshet.



Terminal pavilion.

As a result of these conditions many of the buildings, having stood vacant for years, had fallen down or been destroyed by fire, and the remainder were in a disreputable condition, giving to those passing the river front the impression of a city which had lapsed into decrepitude.

In January, 1910, it occurred to Marcus T. Reynolds, a local architect, that it would be of the greatest value to the city if this congested area could be reclaimed by the demolition of the buildings and the obliteration of the streets and alleys. Accordingly, on his own responsibility, he obtained the necessary surveys and prepared large drawings showing the possible improvement of an area of about eight acres. This would result in the widening of Broadway to adequately serve the growing interurban traffic, the rearrangement of the tracks of the Delaware and Hudson Company, the creation of a broad esplanade with suitable docking facilities along the river front, and the use of the remainder as a public square.

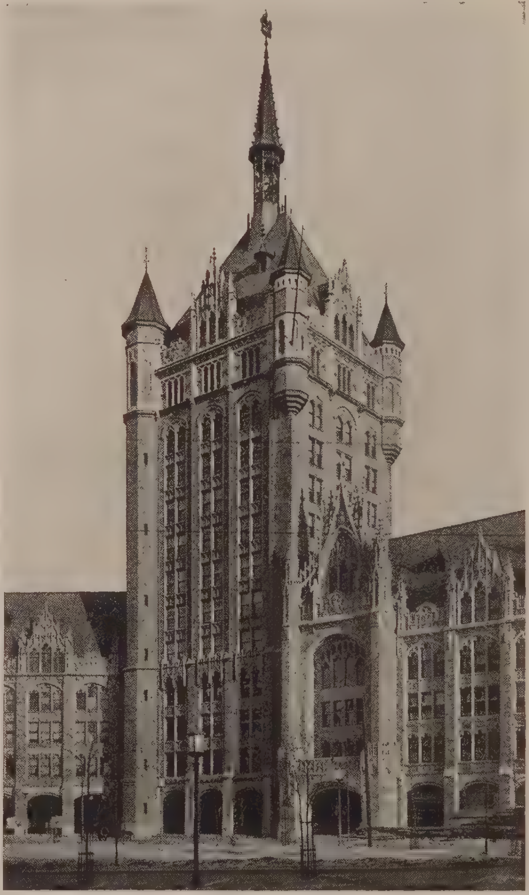
The municipal authorities had long recognized the necessity of improving the river front, and heartily indorsed this more pretentious proposal, and introduced a bill to permit the city to issue bonds to the extent of $2,000,000 to carry it out. The project did not commend itself to certain citizens of reactionary temperaments, who united in opposition, and at a public hearing persuaded the governor to veto the measure.

This, however, did not end the matter, for the project received an impetus when the Delaware and Hudson Company, the owner of much of the land in question, volunteered to erect an office-building on the farther side of the proposed area which would serve as a screen for their tracks, which they were anxious to elevate, and for the freight yard and terminal, which they desired to construct in the heart of the city.

Accordingly, in 1912, a law was enacted giving authority to the city to issue the necessary bonds to acquire the property, to raise the grade on an average of five feet so that it would be above the level of the usual spring freshet, to construct bulkheads and to pave the portions to be laid out in roadways, and for other expenditures incident to the improvement.

The Delaware and Hudson Company thereupon employed Mr. Reynolds to prepare plans for the office-building which they proposed to construct on the east of the Plaza. They had in mind a purely commercial structure of two or three stories and were not prepared to expend the large sum which the erection of the elaborate Gothic structure planned would have entailed.

After months of discussion the railroad company offered the architect his choice of erecting the entire building in what was acknowledged to be an inadequate manner or half of the building as he had designed it. He at once chose the latter and developed the plans for a four-story-and-attic structure 220 feet in length with an arcaded first story, terminated at the north by a square pavilion and on the south by a tower of twelve stories surmounted by a lofty roof terminating in a fleche. This tower was placed at the intersection of the prolongation of State Street, the broad avenue leading to the Capitol, and Hudson Avenue, an important but irregular street, at the point where the Rutten Kill of the ancient Beverswyck entered the Hudson.


Tower.

The completion of these buildings left the project well begun but half done.

By a singular coincidence, on the very day that the building was occupied, March 24, 1915, Mr. Barnes, the proprietor of the *Abany Evening Journal*, consulted Mr. Reynolds concerning the purchase and alteration as a printing-house of a building fronting on the Plaza, which was then nearing completion. Mr. Reynolds, knowing that the railroad company had found their new building only barely sufficient for their present needs, suggested that if the Journal Company would purchase the extreme southerly end of the property originally set aside for the entire improvement, and erect the printing-house thereon, the Delaware and Hudson Company might be induced to continue their building to meet it.

Mr. Barnes, who from the very inception of the idea had been a hearty advocate of the creation of the Plaza, willingly agreed to the proposal, and the Delaware and Hudson Company readily co-operated, with the result that in 1916 the new group of buildings was commenced and has now been completed.

The Gothic style was adopted by the architect as best suited to the extremely irregular-shaped lot at his disposal, and the Flemish type chosen because the city was founded by the Hollanders and Walloons. The building was beginning to take form at the very time that the invasion of Belgium destroyed so many notable buildings.

The buildings, including the freight house, which has been constructed of the same seam-faced granite as the other portions, with the intention of adding two more stories and a high roof when building conditions are more normal, have a perimeter of 2,310 feet and a frontage on the Plaza of 664 feet.

The length of the vaulted arcade is over 500 feet.

At the time when the piles were being driven to support the tower, the great culvert containing the waters of the Rutten Kill was discovered and a new culvert was constructed immediately to the south without reference to any future continuation of the building.

When the project was revived it became apparent that its location would prevent the immediate continuation of the gallery as had been contemplated in the original design. A cross arcade of double the width of those flanking the Plaza was constructed, thus spanning the culvert and giving access to the river front by a broad flight of steps leading to a passage below the tracks of the railroad.

To indicate this important thoroughfare there was designed a pavilion, termed the Hendrick Hudson Portal, of greater elaboration than was employed in the rest of the structure.

Over the wide arch is a perforated balustrade of which the central panel bears the arms of Hendrick Hudson and the date, September 19, 1609.

On Castle Island, about a mile below the city, were found the ruins of a fort which the Indians declared had been erected by white men before the arrival of the *Half Moon*. This was supposed to be the remains of a fortified trading-post erected in 1540 by a French expedition under the patronage of Francis I, whose emblem, the salamander, and a copy of whose signature have been placed on the right buttress.

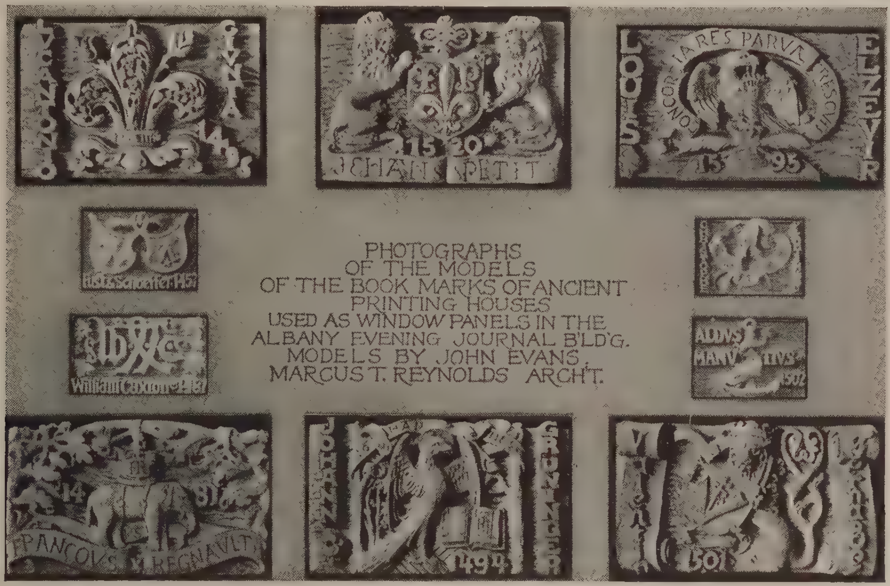
The opposite buttress bears the arms of the Dutch states-general under whom the settlement was founded. In the centre of the upper balustrade has been placed the arms of the Duke of Albany, brother of Charles II, for whom the city was renamed on its passage to the English on September 24, 1664, while in the gable is reproduced the seal of the city of 1752. The original seal of 1686 is used on the balustrade of the arcaded wing, and here on the dormers have been placed the arms of the Van Rensselaer, Schuyler, Bleecker, Cuyler, and Livingston families, with the name of the original progenitor and the date of his arrival in the city.

The printing-house of the *Albany Journal* completes the group. While the same materials have been employed, the style is of a somewhat later period and more ornate. Here the window-panels have been embellished with the book-marks of famous early printers—English, French, Dutch, Flemish, Italian, Spanish (and German), with the dates when they were first employed.

The entrance is a double archway in the centre of which is a niche which is intended for a bust of Thurlow Weed, the founder, whose great grandsons, sons of the present proprietor, served as models for the printers' devils which ornament the keystones, while the arms of the Thurlow family adorn the dormer.

Thus, in eight years from the inception of the scheme the area has been transformed from one of the most unattractive portions of the city to a quarter of which all the people are proud, and the impetus has extended to the entire river front, all of which is now bordered by new concrete bulkheads flanked with a broad quay on which the various steamboat lines have erected new and attractive buildings.

The property to the south is now being acquired, and the improved river front will be continued to the south entrance to the city.



PHOTOGRAPHS
OF THE MODELS
OF THE BOOK MARKS OF ANCIENT
PRINTING HOUSES
USED AS WINDOW PANELS IN THE
ALBANY EVENING JOURNAL B'LD'G.
MODELS BY JOHN EVANS.
MARCUS T. REYNOLDS ARCH'T.

Thrift Stamp Days—Will Repeat Drive on First Day of Each Month

THRIFT STAMP DAY in the U. S. A. has come to stay. The results of the first *Thrift Stamp Day* were so satisfactory that the National War Savings Committee of Greater New York has decided to hereafter set aside every first day of each month as *Thrift Stamp Day*, and all business houses throughout the Greater City have been asked to co-operate and make a special drive to boost the sales of *Thrift and War Savings Stamps* on those days.

The question of setting aside the first day of each month for *Thrift Stamp Day* was broached to the leading business men of the city, and they all received the idea with great enthusiasm. Theatrical managers, when asked about making *Thrift Stamp Day* a permanent affair, approved of the plan and promised to do everything in their power to help make the campaign a success. Special literature has been prepared for the occasion, and the thirty-odd thousand authorized agents of the Treasury Department have been asked to do at least as good on future *Thrift Stamp Days* as they did on the first day.

Stand By!

FEW professions have been harder hit by the war than that of architecture. Hundreds of men have joined the colors and closed their offices, and more are being called. The stopping of general building has deprived many of their customary means of livelihood. But they are standing by and bending their energies to "business as usual," the one big, all-absorbing vital business of helping in every way possible to win this war.

If we cannot go over there, we can do our work over here for the flag. We can buy Liberty Bonds with our savings of better days, if we have any! We can buy War Stamps by denying ourselves in little things.

There is just one way for all of us to make "business as usual"—*win this war.* No talk of "sacrifices" on the side lines. Our job at home is to cheer and brace up the boys who are every day making the supreme sacrifice for liberty over there.

Architects and Their Practice

By "Experience"

NOW, most all of the things I cited in my last article become known to the shrewd investor sooner or later, and he becomes wary of our profession as a class and inclines more and more toward the contractor or construction companies, whose slogan is practical construction combined with great speed in execution of any work intrusted to them. That these canons are not in the great majority of cases properly fulfilled is known to the experienced architect, but the client is not so well informed. He has at least got his building on time, his income from it commences, and he cares little, unless he is an extremely well-educated man, whether the structure that he has is the best solution of the problem that could have been obtained or whether the building is architecturally correct or a monstrosity. He is getting, for the time being at least, a good return for his investment and has saved the architect's commission; this is far more important to the average business man than all the artistic effects that the cleverest designer might have produced.

GOOD WORK AS AN INVESTMENT

A case that will clearly illustrate what I mean comes to my mind. A number of years ago a wealthy man had a large amount of land in a neighboring city upon which he had and was erecting a large number of the cheapest kind of houses for workmen. He usually made the plans for these houses or had the carpenters he employed do it. The structures cost from $1,800 to $2,000 each and the rental he obtained from them netted him a handsome return for his investment for a few years. The houses were miserably built, without conveniences of any kind; in fact, they might be called simply shelters. Some other members of his family became interested in the good-housing movement and tried for a long time to get him to employ an architect and erect houses that at least were well built and convenient; he finally reluctantly consented to have one house erected in this way.

So I was employed, and designed and had built for him a house containing the same number of rooms and practically of the same area. This building cost $3,000 and my commission, and rented for $5.00 a month more than the others, and consequently did not pay anywhere near as much on his expenditures as the others. As long as he lived after that (some five years) he never ceased to deride me, and claim that he had proved beyond dispute the foolishness of any practical business men employing an architect. The sequel to this tale is, however, of interest: within ten years every one of the houses he had erected had either got into such a state that they had to be taken down or were condemned by the board of health; while the house that I had erected stands to-day in good condition.

I do not for a moment admit that builders or construction companies can or do produce better buildings than good architects do, but what I do contend is that many—I will not say the majority—of my profession pay more attention to the artistic and æsthetic part of our craft than they do to the practical and utilitarian portion of it. The greatest trouble I have experienced with my draftsmen through all my years of practice has been to get them to first lay out a practical plan, then to study how it could be soundly and economically constructed, and then and then only, to design the exterior; and on no condition to sacrifice the plan or construction to the latter. An exterior is far more beautiful to me if it has no forced effects and contains no lines or projections other than those absolutely required by the shape of the plan or the needs of construction. Such a building is a true logical expression of the plan, which should be perfectly adapted to the requirements of those who are to occupy it.

Young architects are more apt than the older men to be carried away with enthusiasm of design and neglect the practical for the artistic. I admit that it is much pleasanter to spend one's time and show one's skill on the exterior of a building, than to write specifications, compute strains, or study out problems of construction, but I believe that any sensible person will agree with me when I say that for the true interests of the owner the three latter items are far more important than the ones first mentioned.

If my brethren in the profession would heed these simple rules of practice and govern themselves accordingly, I am quite sure that they would have far less trouble with their clients and that the latter not only would have more confidence in them but would not be inclined to give the preference to construction companies.

The pathway of a young architect is strewn with pitfalls. No matter how careful he may be he will have difficulty in avoiding them all. He will be beset and importuned on all sides by the agents and salesmen of the firms who manufacture the different kinds of material that enter into the composition of his buildings, each claiming that he has the best of its special kinds; so the inexperienced man is very likely to err in his perfectly honest choice. Only the man who has had long years of apprenticeship is able to determine if the real merits of the commodities are exempt from this danger.

Every day sees some new device or material brought out, and salesmen are so persistent that I have frequently known them to go to the owners direct with their wares and by all kinds of arguments try to induce them (the owners) to instruct the architect to use their goods, one of their favorite statements being that the architect is prejudiced against their material, has friends who manufacture goods of the same kind, and accordingly he is specifying their materials, which are really inferior to those that they are calling the owners' attention to. It is very hard to refute these statements and to make an owner understand that the architect is not playing favorites, but is honestly acting as his confidential adviser.

THE WORK OF THE TRUE ARCHITECT

Some owners expect and demand that their architect back them up in whatever course they may take in their dealings with their contractors or with those who may furnish materials or fixtures for their building. They seem to lose all sense of justice or fair play and forget that no honorable man can or will countenance an injustice which it is his plain duty to prevent if he can. The true architect should and will demand and obtain for the owner from the contractor all that he is entitled to, when the former is in the right, and he should be just as particular to see that the constructor receives full justice for all that he does and is not imposed upon in any way. An architect must be an unprejudiced arbitrator on every clause of the contract, specification, and all points that may arise during the construction of the building. It takes a lot of nerve sometimes to decide a mooted point against an owner. The vision of future commissions and the fear of offending his client make the architect very loath to do this, and he is apt to lean the other way and unintentionally do an injustice to the contractor.

Another thing that we all have to face is "favoritism." By this I mean that the owner wants some firm to erect his building. He is not willing, however, to give them his work on a percentage basis. They must compete with others for the work, but he wants them to be low, and intimates more or less broadly that you must favor them or give them a tip so that they will figure low. Of course this is manifestly unfair—in fact, a piece of chicanery that oftentimes an architect is powerless to prevent. The honorable man will not stoop to any such practice, but the owner will and does and you can't prevent him.

To illustrate—a case that occurred in my own practice, of many years: I was the architect for a large corporation, and during all that time the work was done by one concern, who invariably were the lowest bidders. So notorious did this become that during the latter years of my service it was almost impossible for me to get any other contractors to estimate. That there was crooked work being done I knew perfectly well, and I also knew how it was done, but I could not stop it. It was very simple, as you will see. It was customary to call for bids to be handed to me at my office on or before twelve o'clock noon on a day named. At that time the manager of the corporation would be on hand and open the bids with me. But we would never have the bid of the favored contractor. I would request that he should be barred, that his bid should not be considered, that he had not lived up to our requirements, and in justice to other contestants his estimate, when it came, should be thrown out; and would be answered by the manager: "Oh, no, we can't do that. He is too good a man, and I know he has spent a lot of time figuring." He would bluster around in this way for a while and end up with: "Well, I can't stay here any longer now. Telephone and see what is the matter. Lock these papers up and I will come in later and see if he has got his bid in." And then he would leave my office. Upon telephoning the contractor I would be informed that the estimate had been sent, that he did not understand why it had not got there. It must be on its way, etc. And within a little while, usually about half an hour, a breathless messenger would appear with a sealed bid that, he would explain, he had been delayed in delivering. It is hardly necessary to add that when the manager returned and the bid was opened it would be found a little lower than any other.

There is not the slightest doubt in my own mind that there was collusion between this manager and the contractor, but I could not prove it and if I had done so it would have done me no good. The contractor did satisfactory work and I never had any trouble in getting him to carry out my designs to the letter. The manager, who stood high in the estimation of the great corporation, was a fine fellow as the world goes and a good friend of mine.

If I had fought the matter to the bitter end, as some will say I should, I would only have created unpleasantness all around, lost a good client, and actually benefited no one. So I simply held my tongue and let matters drift as they would, which in this case at least was satisfactory to the owners.

Another case: In the early days of my practice I was called upon to erect a chapel connecting with a stone church which had been built some years before.

TEMPTATIONS IN THE WAY OF GRAFT

The committee were composed of leading citizens and churchmen—one in particular might be considered without exaggeration the most prominent man of the city in which the chapel was to be built. He was chairman of the committee and practically ruled it. This man came to me and requested particularly that a certain firm be invited to bid on the work. They had never done any work for me, although I was informed they were reputable. The day the bids were to be handed in, the head of this firm came to my office, asked to see me personally, and when I granted the interview laid an unsealed envelope addressed to the building committee before me and, leaning over, whispered, "There is five hundred dollars waiting for you, young man, when this contract is awarded to us"; and before I, in my surprise, could answer he had turned and left the office. I laid the envelope aside and that evening, when the committee met to consider the bids, had it beside me. When the bids were read by the secretary the prominent member exclaimed: "But where is so-and-so's estimate? I know he has figured on the job." "Gentlemen," I said, picking the unsealed envelope up, "I want to tell you about this envelope, the contents of which, I assure you, I know nothing about, and which the secretary, after I have had my say, will read." I then told them the story of its reception as I have written it, and added that I wished to recommend that the bid, whatever it might be, should not be considered. When the secretary examined the contents of the envelope he found a proposition to erect the building, according to the plans and specifications prepared by me, written in pencil, with the price for said work left blank. Of course the document was rejected and the contract awarded to the lowest legitimate bidder. But what was the result? I obtained the lifelong enmity of the contractor, and the friendship that existed for years between the chairman of the building committee and myself was strained to the utmost—in fact, he was never the same to me after that time.

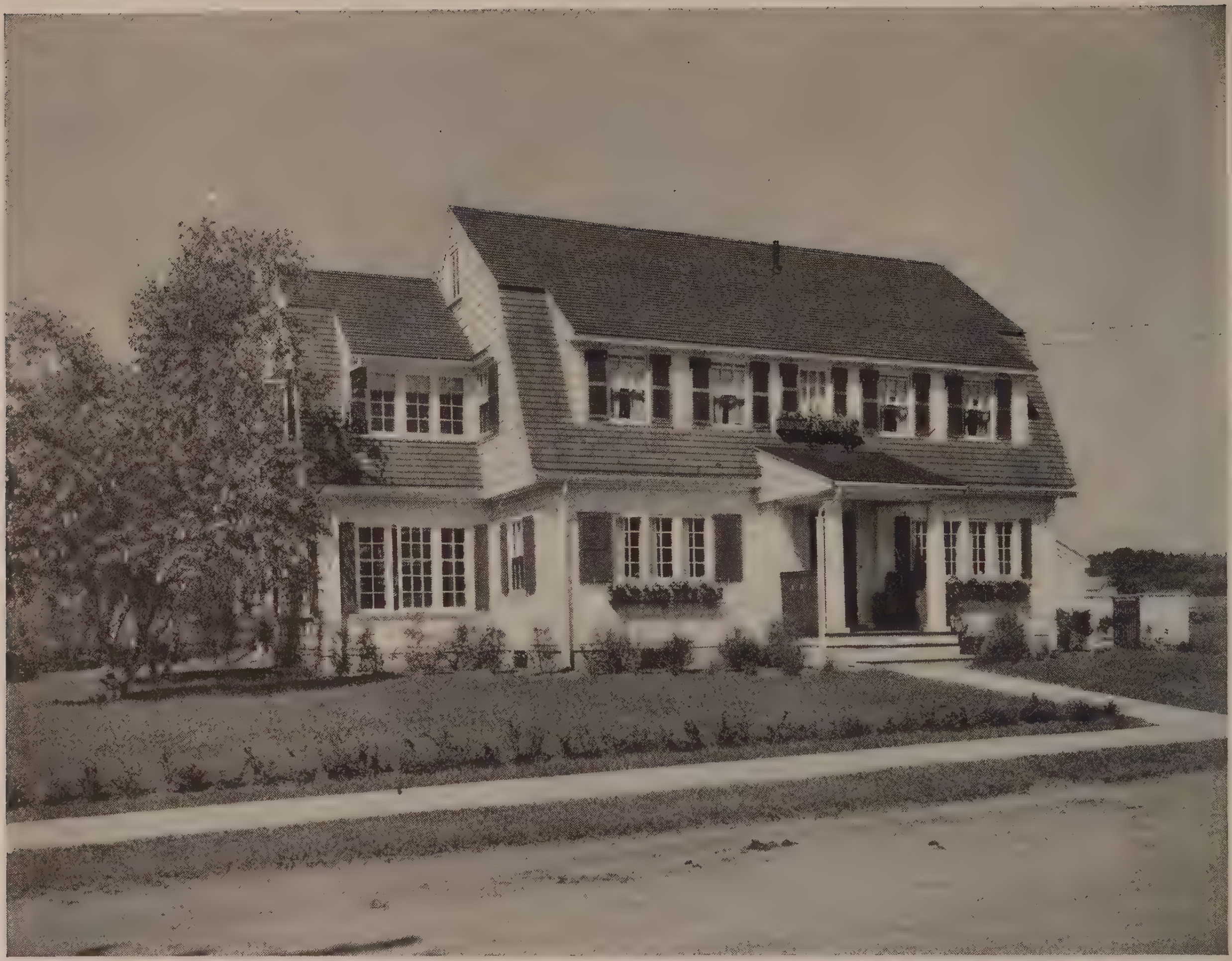
He was a friend of the contractor, and whatever scheme they had my action checkmated.

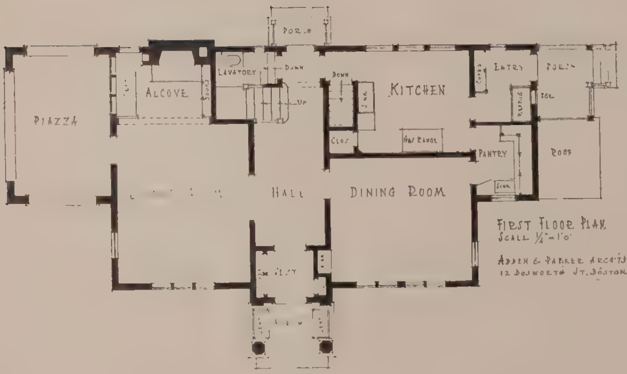
It is obvious that the contractor wanted me, after I had examined the other bids, to fill in his proposal at a slightly lower price. For doing this I was to receive five hundred dollars. The way the prominent citizen was to be reimbursed I never knew, but that there was a nigger in the fence somewhere I am sure.

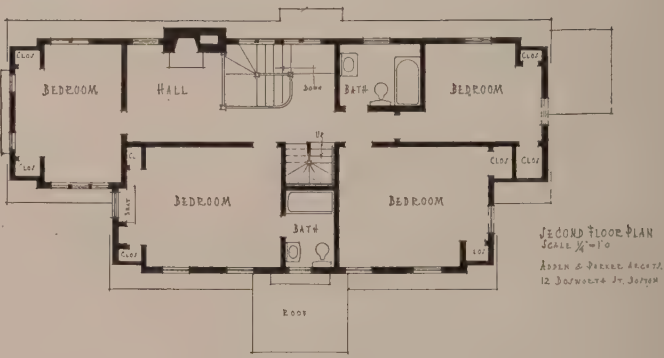
There are scores of other ways by which the same ends are reached, and the busy man is constantly beset and annoyed by them. He has continually to run a gauntlet between unscrupulous owners on one side and unprincipled contractors on the other. Verily, it is a strong man who can pass through such ordeals unscathed.

The reader may think that I have exaggerated these evils, but I am quite sure that the older men of our craft will readily admit the truth of what I have written and give their testimony as to the correctness of my deductions. Only those who have been scorched realize the full danger of fire, and only he who has been tried and stood the test can really be chastened.

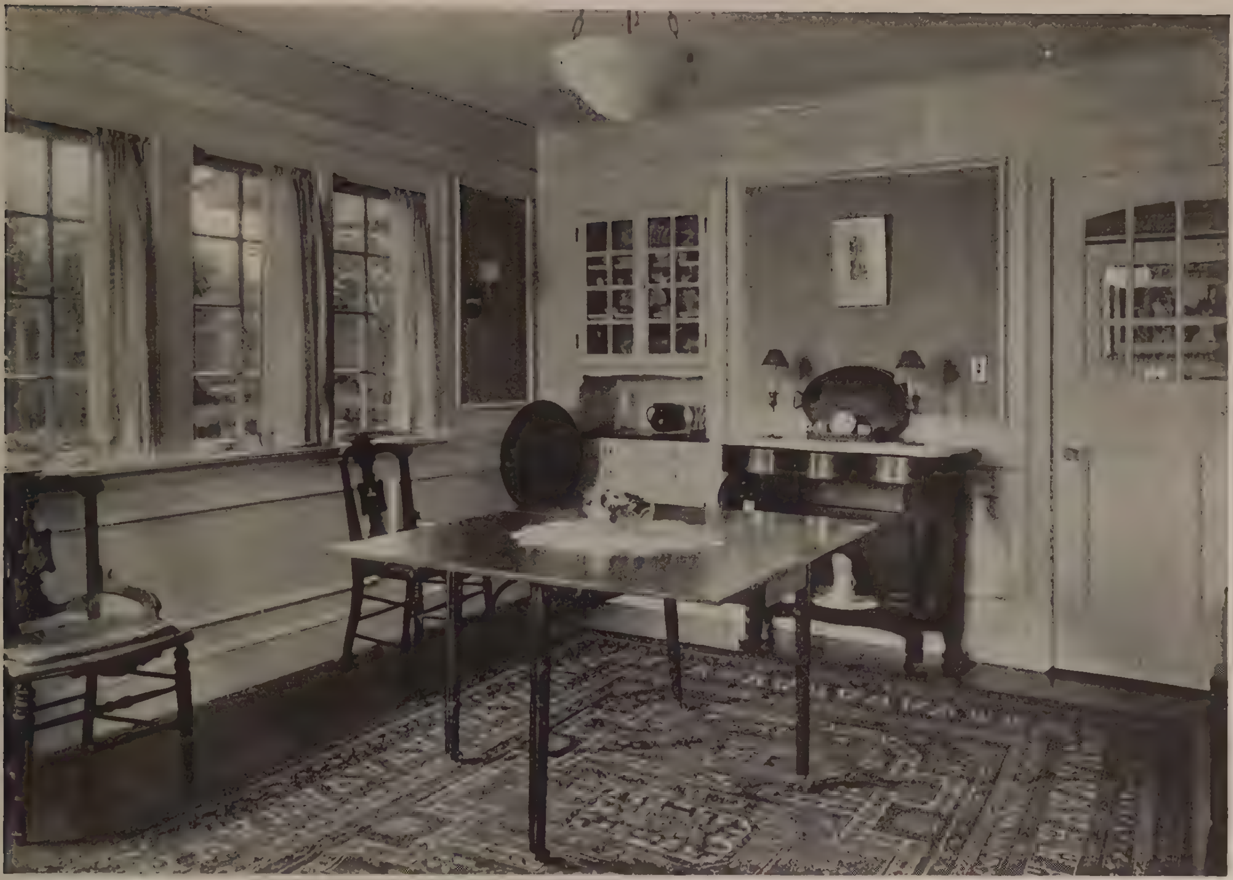
Another thing that the young practitioner (and many of the old ones, too) must guard against is that of unprofessional conduct. I must confess that the code of ethics as practised (not as it is laid down) by some of the most prominent members of the American Institute of Architects, to say the least, is extremely elastic and has been subjected to much adverse criticism. Be this as it may, there is a recognized code of ethics that can and should be lived up to by all honorable men of our profession.



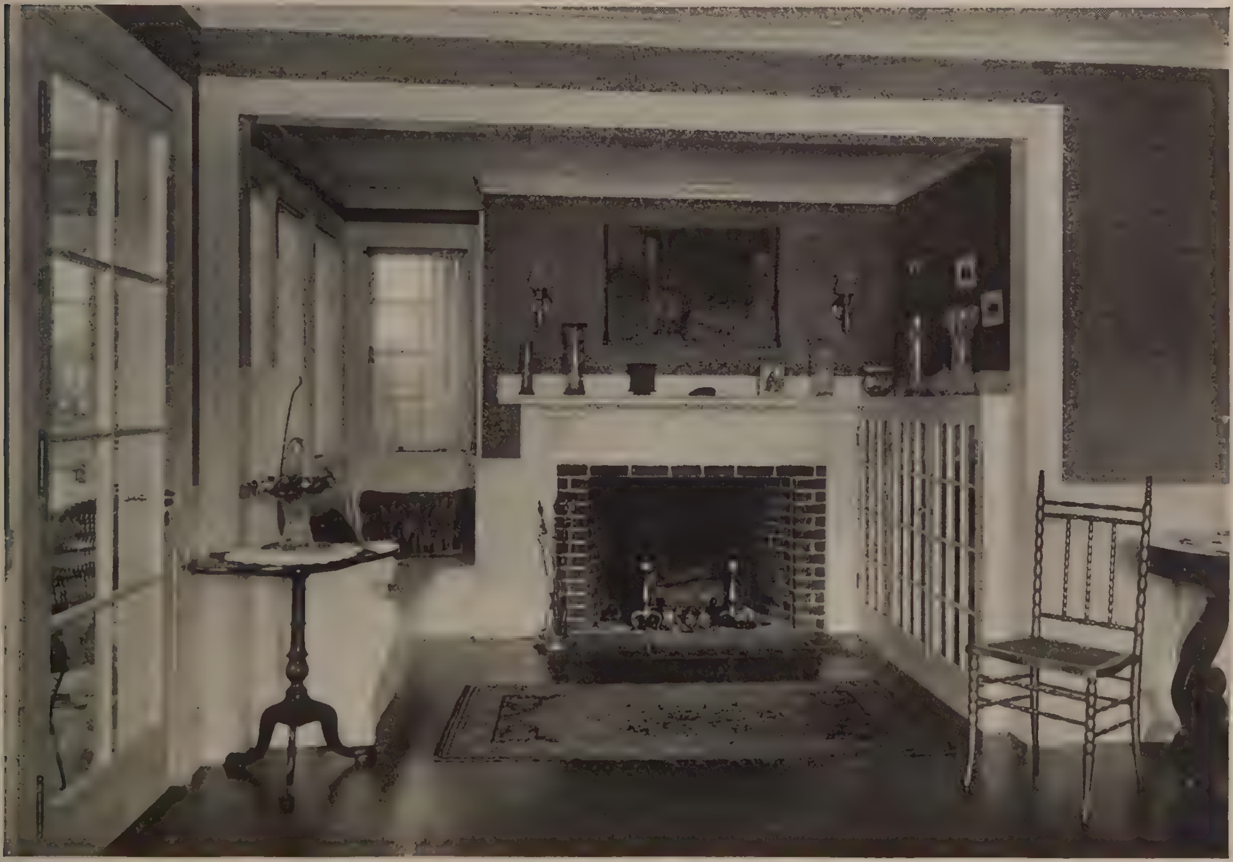




HOUSE AND PLANS, W. H. McGILL, WINCHESTER, MASS. Adden & Parker, Architects.



DINING-ROOM.



ALCOVE.

HOUSE, W. H. McGILL, WINCHESTER, MASS. Adden & Parker, Architects.

The Entrance to Salem Fields Cemetery

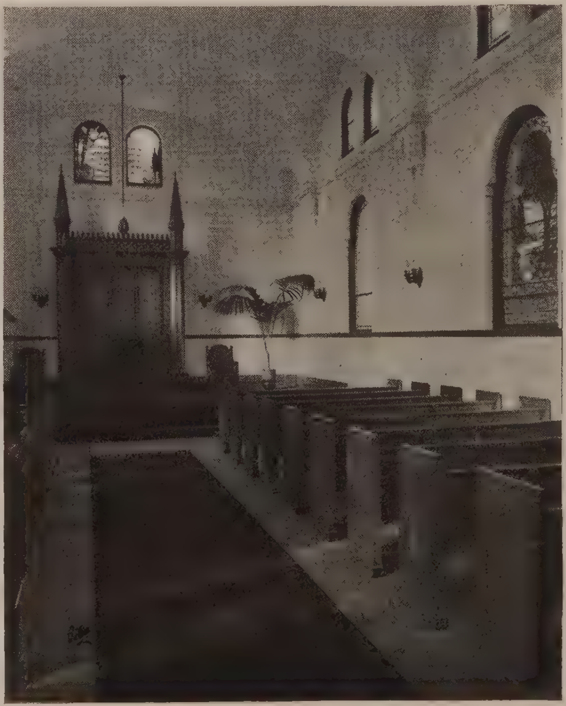
Percy W. Darbyshire, Architect

THE Salem Fields Cemetery is situated at Cypress Hills, Brooklyn, N. Y., on the hillsides overlooking Jamaica Bay. This ground was originally acquired by the Board of Trustees of Temple Emanu-El, of New York City, in the middle of the last century. The necessary administrative offices and superintendent's house were then built adjoining the Jamaica Avenue entrance. These buildings were of wooden construction and purely utilitarian in character, and became entirely inadequate for their purpose with the enlargement of the cemetery and modern ideas concerning the comfort of visitors. The problem of a new administration building and also a chapel for funeral services was put before me by the Board of Trustees in the fall of 1915, and the building which is now illustrated in ARCHITECTURE was built during the year 1916.

The dominant idea controlling the design of this building is that of a great entranceway to the place of the dead, the chapel and offices being subordinate to this thought. The entranceway must be shorn of all unnecessary ornament, and the dignity and simplicity of the architecture must enforce the impression of the spirit at peace upon the living men and women who visit the building.

To give the highest expression of the human spirit, beyond the bounds of the flawless but finite mind of the Greek, I look to the art and architecture of the Orient; therefore this problem in monumental design, which called for absolute dependence for artistic effect upon fine proportion and the right distribution of openings and masses, took, almost unconsciously, forms used in Oriental architecture.

The composite building, consisting of entrance, chapel, offices, and superintendent's residence, was given a sense of power and endurance by its form and by the material employed, which was granite from Maine, and yet the weight of this impression does not enchain the mind, as the rather subtle and graceful arch forms used give a sense of lightness and freedom, which might be said in this case to typify the happiness of the release from material things.



The chapel.

The small chapel, seating about one hundred and fifty people, was kept absolutely simple in design, with large, well-proportioned windows, supplemented by the smaller "clearstory" windows above, cut into the barrel vault of the plaster ceiling, giving a beautiful groined effect to the ceiling of the room. The ark on the end wall of the chapel was donated by Mr. Louis Marshall, the President of the Board of Trustees, and was executed from the architect's design, which incorporated the old wooden doors used for many years in the Temple Emanu-El, New York. This chapel has also been enriched by three stained-glass memorial windows, executed by Mr. Henry Wynd Young, who solved the difficult problem of executing landscape subjects in English antique glass which express the very spirit of the scene conceived by the artist. The Board of Trustees had debarred the use of human figures in the glass work on religious grounds. It is intended that this quiet chapel shall be considered worthy to house the ideals of the religion to which it is devoted and that the architecture of this peaceful place may prove expressive of rest and be grateful to the souls of those who come from the house of mourning.

The vision of the architect is that on approaching the whole building, the sky is seen broken by dome, living arch forms, and minarets with the light breaking through them, a great quietude shall rise and a sense of peace and understanding of life filter through the dense armor of materialism; then the individual effort of the architect will not have been in vain, but will have contributed to the larger life for which man was put into the world.

"IN trying to train the mind to judge of works of architecture, one can never be too patient. It is very easy to hinder one's growth in knowledge by being too ready to decide. The student of art who is much under the influence of one teacher, one writer, or one body of fellow students is hampered by that influence just so far as it is exclusive. And most teachers, most writers, most groups or classes of students are exclusive, admiring one set of principles or the practice of one epoch to the partial exclusion of others."

Legal Decisions of Interest to the Architect

These decisions are edited by Mr. John Simpson, the well-known lawyer

Priority of Liens

Lien statutes are innovations upon the common law over the rights of property, not to be extended in operation and effect beyond their plain provisions. As to their provisions by which a lien attaches, strict construction is the recognized rule. The general rule is that all mortgage liens existing before the right to a mechanic's lien comes into existence—having been perfected as the law requires—are prior to the mechanic's lien, and mortgages subsequent to the mechanic's lien yield priority thereto. The Michigan mechanic's lien law expressly provides that liens for labor and material are subject to any prior recorded title, claim, lien, encumbrance, or mortgage to or upon the land to which the building or improvement belongs. The Michigan Supreme Court holds that mechanics' liens were postponed to the rights of a holder in good faith of a mortgage of the property given to the contractor for the work, and recorded before the permit for the building was issued or excavation begun; nothing in the recorded mortgage or the note it was given to secure indicating that they were given for or had any connection with a building contract.—J. W. McCausey & Co. *vs.* Gittleman (Mich.), 166 N. W. 896.

Materialmen's Action on Contractor's Bond

A contract for the construction of a schoolhouse provided that no subcontract should be made except with parties satisfactory to the architect. In an action by materialmen on the bond of the original contractor, the architect testified that there were no subcontractors. The Michigan Supreme Court holds that the fact that the plaintiffs, who had not agreed at the time they made their bids in a lump sum to take under the original contract and perform in accordance therewith, had before them the plans and specifications was insufficient to make them "subcontractors" within the Michigan statute, requiring notice by subcontractors of reliance on the security of the bond.—People *vs.* Valley Mantel & Tile Co., Michigan Supreme Court, 166 N. W. 839.

Priority of Liens

A contractor had knowledge that the money for the buildings to be constructed was to be borrowed from a trust company, and to be secured by mortgage on the property. By its contract it was to be paid a specified part of the contract price by the trust company. The Circuit Court of Appeals, Fifth Circuit, holds that the contractor is not entitled to a lien prior to the company's mortgage for any amount remaining due on its contract which, together with the payments received from the trust company, would be in excess of such specified sum, although the mortgage was not recorded until after the work was begun.—Union Terminal Co. *vs.* Turner Const. Co., 247 Fed. 727.

Materialmen's Liens

The Arkansas Supreme Court holds that a materialman who employs labor to put in iron work as a completed job is entitled to a lien for such labor as for the price of material furnished in the place to be used.—Terry *vs.* Klein (Ark.), 201 S. W. 801.

Liens for Material Furnished

Under contract with the owner, a materialman furnished lumber to be used in the building of three houses on separate lots. The contract did not set apart any part of the lumber to the separate houses, but the materialman was able to identify, segregate, and correctly estimate the amount and value of the lumber that went into the house on one of the lots, and he claimed a lien therefor on that lot under the Alabama Lien Law. The Alabama Supreme Court holds that he was entitled to a lien, saying that "the whole theory of the statute is to give the materialman a preferred claim on a lot of land for the amount which he has contributed in improving that particular land, or the building situated thereon." The statute provides for a lien for material furnished under contract with the owner of land or his agent on the building for which it is used, and on the land on which the building is situated. In Missouri, where the statute is essentially the same, it has been held that a lien should be declared in the circumstances here shown, and in other jurisdictions cases have been decided on principles which lead to the same result. The Alabama court did not find any express or implied adjudications to the contrary. It did not defeat the lien that the amount or value going into each house was not ascertained at the time the sale of the lumber was agreed on; it was sufficient that it was so ascertained before any attempt was made to enforce the lien and sufficiently specified in the claims filed.—College Court Realty Co. *vs.* Letcher (Ala.), 78 So. 217, 218.

Mechanics' Liens—Sale and Disposal of Property

The Minnesota Supreme Court holds that in an action to foreclose a mechanic's lien, a receiver may be appointed to take possession of, lease, or otherwise handle the property for the benefit of all the parties, under the direction of the court, upon a petition of one of the claimants, where a sale has taken place, and confirmation thereof has been denied, asking that a receiver be appointed to sell and dispose of such property and to take charge and handle it under the direction of the court.—Dezurick *vs.* Iblings (Minn.), 167 N. W. 116.

Effect of Changes in Specifications

In an action upon a bond executed by a contractor and his surety, conditioned on payment of claims and allowing of variations in specifications not exceeding 20 per cent. of the contract price, it appeared that the contractor, when changes were ordered, made them after the architect, as provided in the contract, found the amount of his compensation on account of the change to be less than 20 per cent. of the contract price. The Washington Supreme Court held that there was no such change in the contract as to release the surety. The contract provided that, if changes were made, the parties should agree on the costs, and if they failed to agree the architect should determine the cost, but each party should then be allowed an appeal. When the specifications were changed the architect fixed the cost, and the contractor made the changes without appealing. It was held that the failure of the owner to arbitrate did not defeat his right to recover for damages by reason of failure to complete the building against the contractor and his surety.—Stocking *vs.* Fouts (Wash.) 169 Pac. 593.

Effect of Architect's Refusal to Give Certificate

If an architect is selected in a building contract to pass upon certain claims or perform certain acts which determine questions between the contracting parties and the architect refuses to act, the parties are remitted to the ordinary rules of evidence and procedure to establish their claims. A contract between a contractor and a subcontractor provided that no allowance for delay should be made to the subcontractor "unless a claim therefor is presented to the architect and the contractor within forty-eight hours after the occurrence of the delay." The subcontractor submitted a claim within the time specified to the architect, who refused to act, and he also submitted a claim within the time to the recognized representative of the contractor. It was held that the subcontractor may maintain his claim against the contractor for delay in an action at law, though he had secured no certificate from the architect. When it appeared that the delay was due to matters entirely outside of the subcontractor's contract, and were attributable to the contractor or other subcontractors, it was held proper to submit the subcontractor's claim to the jury.—Holscher *vs.* Ingalls Stone Co., 66 Pa. Superior Ct. 76.

Time for Suit on Surety Bond

A contractor's bond provided that any suit brought thereon to recover any claims thereunder must be instituted within the time allowed by law for instituting a suit to enforce a lien claim. It is held that this provision did not require the owner to bring his suit on the bond on account of the contractor's default within that time. No limitation of the time within which the owner must begin his action would be reasonable which should attempt to limit the owner's right of action to the same time within which lien claimants must begin their suits, for the sufficient reason that the owner could not know the extent of his detriment until either such actions had been commenced, or until the statutory time within which they were required to be commenced had fully expired.—Gintjee *vs.* Knieling (Cal.), 170 Pac. 641.

Architect's Certificate as Evidence of Defects

In an action by the trustee in bankruptcy of a school-building contractor the defense was that the building had never been completed in accordance with the contract, and the defendant claimed that the sums necessary to complete the building should be set off against the contract price. The Michigan Supreme Court held that the trial court properly admitted as exhibits certain certificates made by the architect and by the building committee of the district, their value as evidence being for the jury under testimony and proper instruction. The defendant, in its principal case, offered much testimony to show the defective character of the construction, and the plaintiff thereupon swore many witnesses who testified the structure was completed in accordance with the plans and specifications. The court held that the defendant's further testimony after both parties had rested as to the cost of remedying defects might have been received, in the discretion of the court, but the court's action in striking it out on the plaintiff's motion was not reversible error. The evidence was held sufficient to sustain a verdict for about half the amount claimed.—McMillan *vs.* School Dist. No. 2 (Mich.), 167 N. W. 48.

Action for Breach of Building Contract

In an owner's action against a building contractor for breach of contract neither count of the declaration alleged that the settling of the house was due to the contractor's failure to excavate to a depth affording a solid foundation, as the contract stipulated, and the bill of particulars filed by the plaintiff contained no reference to the foundation walls or the settling of the house. The Rhode Island Supreme Court held that the trial court should have given the contractor's requested charge, not to consider whether the walls went down to good solid earth or not. The purpose of a declaration is to advise the defendant as to the nature of the plaintiff's claim, and the purpose of a bill of particulars is to set forth in detail and more minutely the precise acts or omissions which the plaintiff claims render him liable in damages.—Forbes *vs.* Benson (R. I.), 103 Atl. 228.

Right to Excavated Materials

The contractors for the building of a schoolhouse in Sault Ste. Marie, Ontario, in excavating for the foundations, took out of the land a quantity of stone and sold it as their own. No custom or usage was proved, and there was nothing in the evidence nor in the contract or specifications which threw much light upon the matter. The specifications showed that excavated earth was to remain the property of the owners; it was also provided that the contractors were to keep trimmed up in piles all materials delivered to the work "and all refuse, rubbish, and other materials not removed"; and, further, that the contractors should promptly remove all materials rejected and all rubbish. The Ontario Supreme Court held that the contractors were not entitled to remove the stone, and were liable to the owners for its value, no intention on the part of the owners to abandon it being deducible from the evidence or the circumstances. Sir W. R. Meredith, C. J. O., in a dissenting opinion, said that it was not an unreasonable inference from the provisions in the specifications that the contractors should have the right to the stone. The statement in Halsbury's "Laws of England," vol. III, p. 187, that "the builder, in the absence of express stipulation to the contrary, has a general right to dig the foundation of the building and to convert to his own use the materials dug out, provided that they are ordinary materials," should, in his opinion, be adopted as the law.—McLeod *vs.* Sault Ste. Marie Public School Board, 36 Ontario L. R. 415.

Written Order for Extra Work

The Quebec King's Bench holds that where there is a stipulation in a building contract that "no additional work, unless the same be ordered in writing by said city or archi-

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tects," the acknowledgment of the architect that he has ordered the additional work for which the contractor claims the cost, takes the place of the requisite writing. A letter of the architect "to have the excavation carried down and the terrace wall built on rock as required under the specifications and to proceed with the work accordingly," cannot be considered as a written order to make the excavation as additional or extra work, but rather to execute the work according to the contract.—Quinlan *vs.* City of Montreal, 25 Que. K. B. 272.

Construction of Release from Liens

In an action to foreclose a lien for materials furnished to a subcontractor the plaintiff contended that a clause of the agreement by the material man and the subcontractor purporting to release the original contractor and the owner "from any and all liens for labor and materials furnished by them" referred to labor and materials thereafter to be furnished by them in completing the subcontract and did not include any lien for materials previously furnished to the subcontractor by the material man. The California Supreme Court held that as, according to the terms of the agreement, the original contractor was to pay for all materials and labor subsequently furnished, and done to complete the subcontract, the clause referred to and included materials and labor previously furnished for the performance of the subcontract.—Aigeltinger *vs.* Burke (Cal.) 199 Pac. 373.

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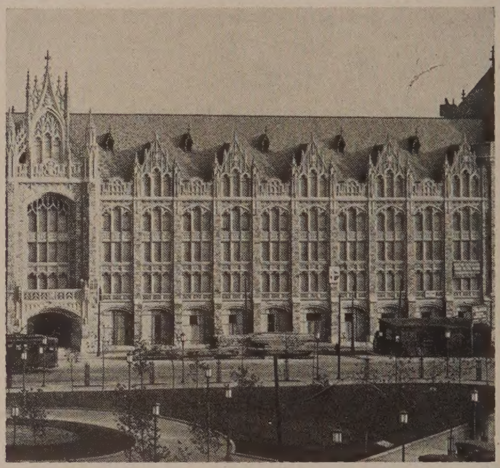

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